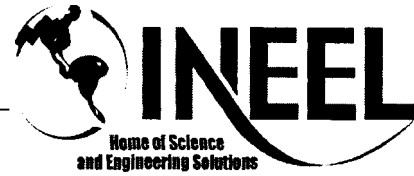


The following is Cost Estimate Support Data provided on CD which accompanied this document.

Please see page 52 of document.



INTEROFFICE MEMORANDUM

Date: July 3, 2003

To: S. L. Austad MS 3920 6-2054

From: R. D. Adams/S. N. Wasley *[Signature]* MS 3655 6-2963

Subject: OU 7-10 STAGED INTERIM-ACTION STAGE III PROJECT – RETRIEVAL SYSTEM PROJECT

Estimating Services has prepared three risk adjusted project support (Type 5) estimates for the subject project. These estimates were based on information received May 19, 2003, through July 3, 2003.

The total costs of these projects are:	Option 1	\$292,000,000
	Option 2	\$268,000,000
	Option 3	\$271,000,000

Included in the estimate are costs for ESH&Q, engineering, procurement, construction, startup and testing, project management, escalation, and contingency. The estimated costs have been escalated per the OU 7-10 Interim Action Stage III Project LCB schedule. For more detailed information, please refer to the Cost Estimate Support Data Recapitulation form.

Attached for your review are the Summary Report, the Cost Estimate Support Data Recapitulation form, Project Summary Report, risk analysis charts, and Detail Item Report. This estimate assumes that Block 6 of the Nine Block Matrix applies.

Due to the minimal detail and scope definition, this estimate is considered a "Type 5" estimate and is not intended to be used to establish a cost baseline.

If you have any questions regarding this estimate, please contact me at 526-2963 or Scott at 526-3620, or e-mail me at *radams* or Scott at *swasley*.

RDA

Attachments

cc: R. J. Turk, MS 3878
Estimate File 5974-2 *[Signature]*
R. D. Adams File (RDA-22-03)
S. N. Wasley File (SNW-I 1-03)


Uniform File Code: 8000

Disposition Authority: A16-1.5-b

Retention Schedule: Cut off at the end of each fiscal year. Destroy 15 years after cutoff.

NOTE: Original disposition authority, retention schedule, and Uniform Filing Code applied by the sender may not be appropriate for all recipients. Make adjustments as needed.

COST ESTIMATE SUPPORT DATA RECAPITULATION

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM
Estimator: S. N. Wasley, R. D. Adams
Date: July 2, 2003
Estimate Type: Project Support
File: 5974-2 R
Approved By: 

Page 1 of 7

- I. **PURPOSE:** *Brief description of the intent of how the estimate is to be used, i.e., for engineering study, comparative analysis, DWP, LCB out-year planning, BCP, etc.*

There are currently three options for retrieving the remaining waste from Pit 9 (all waste in Pit 9 except that which is to be removed under the Pit 9 Phase II scope.) Only one option will be considered for further development. These estimates will help facilitate the down select.

11. **SCOPE OF WORK:** *Brief statement of the project's objective. Thorough overview and description of the proposed project. Identify work to be accomplished, as well as any specific work to be excluded.*

The Retrieval System Project (RPS) will construct facilities required to retrieve the overburden and buried waste from Pit 9. All three options use a trackhoe to excavate the overburden and buried waste. In Options 1 and 3, the trackhoe places the excavated material in waste boxes. In Option 1, an overhead crane loads the waste box onto an automatic guided vehicle (AGV), which then delivers the box to the treatment facility. Option 3 uses a forklift to load the waste boxes onto the AGV. Option 2 uses a front-end loader to move the excavated material from the trackhoe pile to the treatment facility. Waste that is to be returned to the pit for final storage is returned in dirt hoppers on the AGV, unloaded by the crane, forklift, or front-end loader (equipped with forks), and placed on the pit bed.

Option 1 building sizes:

The retrieval facility structure (RFS) is approximately 135,000SF. This building includes the retrieval area, overburden staging area, crane maintenance area, operating corridors, and operating mezzanine. The main support building is 31,200SF (this building remains the same size for all options.) Included in the main support building are the fire riser and equipment room, electrical room, instrument and control room, change rooms, maintenance and equipment storage area, maintenance bay, corridors, transfer airlock, wash bay, exit airlock, and HVAC room. The airlock to characterization is 4,200 SF (this building remains the same size for all options.)

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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Option 2 and 3 building sizes:

The retrieval facility structure is approximately 127,000SF. The other two buildings are the same size as for Option 1.

The project scope will include:

- A. RFS
- B. Stainless Steel Liner Panels as required
- C. Facility Floor Structure/Foundation
- D. Roads, Site Grading, and Parking
- E. Dust Suppression System
- F. Plant Air System
- G. Breathing Air System
- H. Heating, Ventilation, and Air Conditioning
- I. Fire Protection
- J. Instrument and Controls (I & C)
- K. Radiological Monitoring
- L. Emissions Monitoring
- M. CCTV System
- N. Furnishings
- O. Emergency Equipment
- P. Remote Excavation and Material Handling Equipment

111. **BASIS OF THE ESTIMATE:** *Overall methodology and rationale of how the estimate was developed. Source documents to include drawings, design reports, engineers' notes and/or other documentation upon which the estimate is originated. Overall explanation of sources for resource pricing.*

- A. The estimate was developed using a bottoms-up quantifiable technique. Resources, material costs, and productivity rates were derived from these quantities.
- B. Information from the OU 7-10 Glovebox Excavator Method Project was used to establish several unit costs. See detail sheets for specifics.
- C. Vendor preliminary quotes were used for equipment as referenced in the details. Allowances for non-standard requirements or components, which have not been completely engineered at this stage of project development, were estimated by the cognizant engineer with input from the vendors.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued-

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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- D. *Process Plant Construction Estimating Standards*, 2000 Edition, as published by Richardson Engineering Services, Inc. and *RSMMeans® Facilities Construction Cost Data*, 15th Annual Edition were used for standard material and labor costs. The information provided by these standard references was adjusted to reflect requirements and working conditions at the proposed site. Details of the adjustments and adjustment justification are included in the estimate file.
- E. Drawings and equipment lists from Engineering were used for quantity takeoffs.
- F. A material handling fee of 12% has been applied against non-subcontracted material and equipment costs per the Detailed Work Plan (DWP) *System Guidance*, FY 2003-2005.
- G. The General and Administrative (G&A) rate of 38% has been applied against the material handling fee per Detailed Work Plan (DWP) *System Guidance*, FY 2003-2005. G&A adders have also been included in all BBWI INEEL personnel burdened labor rates.
- H. Current Idaho state tax of **6%** was applied to all material and equipment prices.
- I. The INEEL Cost Estimating Guide, dated September 2002; GDE-112, Section 2.5, dated September 3, 2002, Rev. 07; MCP-2871, Rev. 2, dated August 2001; and DOE Manual 413.3-1, approved March 28, 2003, *Project Management for the Acquisition of Capital Assets* were used to define estimating requirements and methodologies.
- J. Cost specialists organized the cost data after extensive teaming meetings discussing the project needs and requirements.
- K. Costs were developed using Success© by U. S. Cost to a level of detail consistent with the current level of design.
- L. For consistency, a standardized work breakdown structure (WBS) was used to define the structure of the estimate.
- M. Escalation factors, as identified in the INEEL Cost Estimating Guide and DWP Systems Guidance, FY2003-2005, were applied to the project components to properly address the effects of inflation on the projected costs.

IV. **ASSUMPTIONS:** *Condition statements accepted or supposed true without proof of demonstration; statements adding clarification to scope. An assumption has a direct impact on total estimated cost.*

- A. Project Definition Assumptions:
 - 1. Waste outside of defined pit boundaries will not be retrieved.
 - 2. All Lockheed Martin Advanced Environmental Systems, Inc (LMAES) structures and equipment, with the exception of the sheet piles, concrete, and rails, will be removed prior to construction for Stage III.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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3. Pretreatment of the contaminants prior to excavation is outside the scope of this project. This includes methods such as in-situ thermal desorption / grouting with paraffin and in-situ vitrification for dust control.
 4. Hot-spot retrieval scenarios less than K-acre will not be considered for Stage III.
 5. Based on preliminary hazard evaluations, the primary confinement for retrieval is assumed to be classified as a Hazard Class Safety Category II nuclear facility.
 6. Pit 7 will not be retrieved unless the waste falls within the boundaries of Pit 9.
- B. Original waste containers are assumed to be significantly degraded.
- C. Confinement Assumptions:
1. Retrieval of waste zone material will require a primary and secondary confinement system.
 2. The retrieval primary confinement will withstand a design pressure of at least -1 in. (about 5 psf) of water and abnormal pressures as high as -4 in. of water (about 20 psf).
 3. Primary confinement material must be decontaminable or contamination must be fixed before movement or demolition.
 4. Equipment will operate inside a controlled-environment enclosure with minimal human intervention.
- D. The actual work will not exceed the proposed work scope activities and/or quantities as shown on the Cost Estimating Detail Sheets.
- E. The activities for this project will be completed as identified within project Life Cycle Baseline (LCB) schedule. Failure to meet this schedule could result in costs not reflected in this estimate, and an evaluation of this estimate will be needed to resolve any cost delta issues created by the use of any alternative schedule.
- F. INEEL operating contractor wages will apply for the non-subcontracted portions of this work.
- G. It has been assumed that all radiological technicians, Engineering, Design, Environmental, Safety, and Quality support will be available to support this work as required.
- H. It has been assumed that no overhead interferences will be encountered during this project.
- I. The cost estimate does not consider or address funding restrictions. It is assumed that sufficient funding will be available in a manner allowing optimum usage of that funding as estimated and scheduled.
- J. No monies are included in the event of man-made disaster (fire, explosion, etc.), or due to an act of God.
- K. This estimate assumes no medical surveillance of personnel performing work within the SDA area will be required.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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- L. Costs have been presented in FY 2003 dollars and escalated to the projected midpoint of each major activity based on the project LCB schedule. Escalation rates are based on the rates provided by DOE-HQ, associate deputy secretary for Field Management, Office of Projects, and Fixed Asset Management and found in the DWP Systems Guidance, FY 2003-2005.
- M. Assume that the time allotted in the schedule for contract development, bid, and award will be sufficient.
- N. No rock or rock excavation will be encountered or required.
- O. Provisions have not been made for a negotiated 8-A set aside contract. It is assumed that the procured portions of this project will be competitively bid within the local subcontracting community using contractors familiar with and up to date with the requirements needed to work at the INEEL. It is further assumed that in order to create a competitive business environment, a sufficient quantity of qualified respondents will participate in this bidding process.
- P. It has been assumed only one mobilization and demobilization per construction subcontract will be needed. Once the crews have moved onto the project site, no others will utilize the project area. Once the mobilization has been completed, the work will proceed continuously until it has been completed. At that time, the crews will demobilize from the project.
- Q. All construction activities will be performed during a normal working schedule, with no premium time. Construction activities for this work will use the current prevailing INEEL Site Stabilization Agreement rates. No provisions have been made for premium rates for labor productivity factors due to extended or off-shift work periods. It is assumed that a schedule will be provided that will allow for normal construction periods.
- R. Assume the on-going LMAES litigation or site activities will not have an adverse effect on the planned construction.
- S. Assume that the operating personnel will have sufficient time to properly train on the project equipment.
- T. Assume the existing rail foundation from the LMAES project will be available and structurally adequate to support a portion of the retrieval facility structure.
- U. For perimeter not supported on the rail foundation, allow a foundation wall approximately 1' thick and 5' deep, column footings 6' x 6' x 1'-6" thick, and column piers 1'-6" x 1'-6" x 5' high.
- V. Assume building slabs will be 6 inches thick, except the maintenance bay slab will be 8" thick.
- W. Assume the perimeter "track" will be 10' wide x 1' thick per B. C. Spaulding.
- X. Assume all excess excavated material will be used as fill through the remainder of the project site.
- Y. Assume the crane maintenance area required for Option 1 is stainless steel checker plate, and floor supported stainless steel support members.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued -

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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- Z. Access to the crane maintenance area will be from the second level of the operating gallery.
- AA. An isolation curtain will be used to separate the crane maintenance area from the main retrieval area.
- BB. Stainless steel floor liners will be required in the wash bay (including the basin floor and walls), the airlock to characterization, maintenance bay glovebox, half of the HVAC room, clean transfer airlock, and personnel airlock.
- c c . Assume partitions within the main support building (MSB) will be full height, gypsum board on structural steel/metal stud construction.
- DD. Assume all areas within the MSB are open to the fabric structure above except areas within the paneled retrieval structure.
- EE. Assume all single and double personnel doors will have to be balancing type doors due to the pressure differential requirements between areas.
- FF. Assume all ductwork will be stainless steel, 10 gauge, welded construction.
- GG. Allow access platforms around HEPA filter housings.
- HH. Assume retrieval structures for Options 2 and 3 are identical.
- II. Assume the existing fire system supplying the GEM project will be of sufficient size and will be reused for this project.
- JJ. Assume all retrieval support structures, including the excavation structure, will be fabric skin with engineered steel frame structures.
- KK. The panel enclosures will be of similar construction to the GEM RCS.
- LL. Assume strippable coatings will be applied to all panel interior surfaces for ease of decontamination, except the wash bay enclosure.
- MM. No new radiological control equipment will have to be qualified for this project.

V. **CONTINGENCY GUIDELINE IMPLEMENTATION:** *Explanation of methodology used in determining overall contingency. Identify any specific drivers or items of concern.*

The intent and purpose of contingency within an estimate is to compensate for possible inaccuracies within the estimate that may cause anticipated costs to vary from actual costs. Reasons for inaccuracies include variations in unit costs and quantities, differences in craft or man-hour requirements, etc. The project team has reviewed and discussed issues and concerns relative to this estimate and has included dollar amounts for contingency within the estimate as deemed appropriate. Based on the anticipated scope of work, the assumptions applicable to that scope of work, and the amount of contingency that has been incorporated, the project team has a high level of confidence in the estimate. The project team identified the same risks and degree of risk effects for all three options due to the similar design of the options.

COST ESTIMATE SUPPORT DATA RECAPITULATION

- Continued-

Project Title: OU 7-10 STAGED INTERIM ACTION STAGE III PROJECT – RETRIEVAL
PROJECT SYSTEM

File: 5974-2 R

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Information and technique included in “Cost Uncertainty Analysis,” presented by J. W. Kirch, June 13, 2002, was used to develop BBWI’s Easy Risk tool. This tool helps determine appropriate percentage ranges to use as input to the @RISK program based on the degree of scope definition, complexity, and innovation that are perceived by the project team for each component of the project. Each of these three factors is given a score of from 1 to 5. This score represents the level of risk each factor contributes to the project. From the calculated risk, a percentage contingency range is determined from historical data on EM projects completed from 1999 to 2001.

Another risk application tool was used to arrive at the contingency used for this estimate, which linked the Success estimating software with @RISK risk analysis software. In the @RISK program, the key estimated cost summary levels were assigned a range (calculated by Easy Risk.) These values represent possible variations in the final cost of that level, and a degree of confidence in the accuracy and completeness of the information provided to the estimator. These bounding values were then run through a Latin Hypercube sampling simulation 2,000 times to arrive at the additional money required to address risk at various levels of confidence. The risk output is shown both tabularly and graphically. The calculated risk amounts, represented as percentages of the appropriate levels, were applied to the estimate levels to give the most-likely cost including risk. These risk analyses for 85% confidence level resulted in the overall contingency that is reflected in the summary sheets of the estimate.

Significant contributors to project risk include:

- Pre-conceptual stage of design
- Lack of scope definition
- Combination of technologies not yet proven
- Remote operated facility
- Large, highly technical facility
- Optimistic schedule

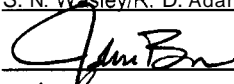

VI. OTHER COMMENTS/CONCERNS SPECIFIC TO THE ESTIMATE:

- A. The elements identified in the assumption portion of the estimate have addressed the conditions upon which the estimate is based. The conditions identified in these assumptions address those currently understood and known to be present or expected, as well as those specifically excluded from consideration.
- B. Funding requirements identified by year cannot significantly change without impact to the schedule.
- C. Due to percentage rounding, the Success reports will not reflect the exact dollars as shown in the detail reports.

TPC Summary Report

Project Name: **OU-7-10 Staged Interim Action
Stage III Project- Retrieval System Project- Option 1**
 Project Location: **INEEL-RWMC**
 Project Number: **5974-2 Option 1-R**

<u>ESTIMATE ELEMENT</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>TOTAL</u>
		10.42%	51.33%	
Total Estimated Cost (TEC)	\$165,781,738	\$17,269,593	\$93,969,318	\$277,020,649
		16.08%	71.80%	
Other Project Cost (OPC)	\$7,318,420	\$1,176,802	\$6,099,474	\$14,594,696
<hr/>				
		10.66%	52.24%	
Total Project Cost (TPC)	\$173,100,158	\$18,446,395	\$100,068,792	\$291,615,345
Rounded TPC	(Rounded to the nearest \$ 1000000)			\$292,000,000

	Remarks
Type of Estimate: <u>Project Support</u> Estimator: <u>S. N. Wasley/R. D. Adams</u> Checked By: <u></u> Approved By: <u></u>	



Project Summary Report

Project Name: **OU-7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 7**
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Contingency</u>	<u>Contingency%</u>	<u>TOTAL</u>
1.0	ESH&Q	\$13,739,840	\$1,114,301	\$6,402,636	43.10%	\$21,256,777
1.01	--ENVIRONMENTAL	\$6,671,430	\$541,053	\$3,108,824	43.10%	\$10,321,307
1.02	--SAFETY ANALYSIS	\$1,081,854	\$87,738	\$504,134	43.10%	\$1,673,725
1.03	--SAFETY & HEALTH	\$1,940,973	\$157,413	\$904,475	43.10%	\$3,002,860
1.04	--FIRE PROTECTION	\$159,096	\$12,903	\$74,137	43.10%	\$246,136
1.05	--RADIOLOGICAL CONTROLS	\$583,352	\$47,310	\$271,837	43.10%	\$902,499
1.07	--EMERGENCY PLANNING	\$21,213	\$1,720	\$9,885	43.10%	\$32,818
1.08	--SAFEGUARDS & SECURITY	\$100,000	\$8,110	\$46,599	43.10%	\$154,709
1.09	--QUALITY	\$3,181,922	\$258,054	\$1,482,746	43.10%	\$4,922,722
2.0	DESIGN ENGINEERING	\$21,212,815	\$1,312,225	\$15,047,996	66.81%	\$37,573,036
2.01	--CONCEPTUAL DESIGN	\$4,242,563	\$110,307	\$2,907,962	66.81%	\$7,260,832
2.02	--PRELIMINARY DESIGN	\$6,363,844	\$341,738	\$4,479,707	66.81%	\$11,185,290
2.03	--FINAL DESIGN	\$10,606,407	\$860,180	\$7,660,326	66.81%	\$19,126,913
3.0	PROCUREMENT	\$44,631,032	\$3,619,577	\$26,905,499	55.76%	\$75,156,107
3.1	--PROCUREMENT MANAGEMENT	\$1,718,238	\$139,349	\$1,035,827	55.76%	\$2,893,415
3.2	--PROCUREMENT - EQUIPMENT	\$36,816,055	\$2,985,782	\$22,194,296	55.76%	\$61,996,133
3.2.01	---RETRIEVAL EQUIPMENT	\$7,086,100	\$574,683	\$4,271,805	55.76%	\$11,932,587
3.2.02	---WASH BAY EQUIPMENT	\$258,322	\$20,950	\$155,728	55.76%	\$434,999
3.2.04	---MSB/GLOVEBOX EQUIPMENT	\$137,800	\$11,176	\$83,072	55.76%	\$232,047
3.2.05	---FABRIC STRUCTURE - PROCUREMENT	\$2,685,828	\$217,821	\$1,619,132	55.76%	\$4,522,781
3.2.06	---LINER PANELS - PROCUREMENT	\$23,290,356	\$1,888,848	\$14,040,424	55.76%	\$39,219,628
3.2.07	---PLANT AIR COMPRESSOR-PROCUREMENT	\$28,620	\$2,321	\$17,253	55.76%	\$48,194
3.2.08	---RADIOLOGICAL/CRITICALITY MONITORING EQUIP.-PROCUREMENT	\$732,248	\$59,385	\$441,430	55.76%	\$1,233,064
3.2.10	---HVAC EQUIPMENT-PROCUREMENT	\$2,301,602	\$186,660	\$1,387,505	55.76%	\$3,875,767

INEEL

Project Summary Report

Project Name: **OU-7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 7**
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 Option 7-R**

Client: **S. L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
3.2.11	—CHILLER EQUIPMENT-PROCUREMENT	\$295,179	\$23,939	\$177,947	55.76%	\$497,065
3.3	--BBWI MATERIAL HANDLING FEE	\$6,096,739	\$494,446	\$3,675,375	55.76%	\$10,266,560
4.0	CONSTRUCTION	\$76,652,285	\$10,240,745	\$41,058,184	47.25%	\$127,951,214
4.1	--CONSTRUCTION MANAGEMENT	\$7,424,405	\$991,911	\$4,154,892	49.37%	\$12,571,209
4.2	--CONSTRUCTION SUBCONTRACTS	\$69,227,799	\$9,248,834	\$36,903,292	47.02%	\$115,379,925
4.2.01	—GENERAL CONDITIONS	\$14,003,200	\$1,881,517	\$7,000,009	49.36%	\$23,845,533
4.2.02	----SITEWORK	\$952,777	\$127,291	\$514,104	47.60%	\$1,594,172
4.2.02.01	-----RELOCATE BERM & DRAINAGE	\$289,307	\$38,651	\$142,819	43.55%	\$470,777
4.2.02.01.01	SITEWORK	\$229,289	\$0	\$113,190	49.37%	\$342,479
4.2.02.01.01.01	Demo Lift Station Concrete	\$33,201	\$0	\$16,390	49.37%	\$49,591
4.2.02.01.01.02	Demo Lift Station Electrical	\$6,922	\$0	\$3,417	49.37%	\$10,339
4.2.02.01.01.03	Demo Fire Pipe in Berm	\$8,300	\$0	\$4,097	49.37%	\$12,398
4.2.02.01.01.04	Excavate New Basin	\$19,878	\$0	\$9,813	49.37%	\$29,691
4.2.02.01.01.05	Relocate North Berm	\$151,773	\$0	\$74,924	49.37%	\$226,698
4.2.02.01.01.06	Ex & Backfill Discharge Pipe	\$9,214	\$0	\$4,549	49.37%	\$13,763
4.2.02.01.02	CONCRETE	\$24,543	\$0	\$12,116	49.37%	\$36,659
4.2.02.01.02.01	Concrete Lift Station	\$20,648	\$0	\$10,193	49.37%	\$30,841
4.2.02.01.02.02	Ductbank Concrete	\$3,895	\$0	\$1,923	49.37%	\$5,818
4.2.02.01.05	METALS	\$5,903	\$0	\$2,914	49.37%	\$8,817
4.2.02.01.15	MECHANICAL	\$22,175	\$0	\$10,947	49.37%	\$33,122
4.2.02.01.16	ELECTRICAL	\$7,397	\$0	\$3,652	49.37%	\$11,049
4.2.02.01.16.01	Switchgear & Transformers	\$970	\$0	\$479	49.37%	\$1,448
4.2.02.01.16.02	Raceways & Fittings	\$3,015	\$0	\$1,488	49.37%	\$4,504
4.2.02.01.16.03	Conductors & Grounding	\$1,818	\$0	\$897	49.37%	\$2,715
4.2.02.01.16.04	Testing	\$1,595	\$0	\$787	49.37%	\$2,382
4.2.02.02	----EARTHWORK	\$517,072	\$69,081	\$289,360	49.37%	\$875,513

INEEL

Project Summary Report

Project Name: OU-7-10 **Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
4.2.02.02.01	RETRIEVAL FACILITY STRUCTURE EARTHWORK	\$470,601	\$62,872	\$263,354	49.37%	\$796,828
4.2.02.02.02	WASH BAY EARTHWORK	\$4,480	\$599	\$2,507	49.37%	\$7,586
4.2.02.02.04	-----MAIN SUPPORT BUILDING EARTHWORK	\$18,118	\$2,421	\$10,139	49.37%	\$30,677
4.2.02.02.07	-----CHARACTERIZATION AIRLOCK EARTHWORK	\$23,872	\$3,189	\$13,359	49.37%	\$40,421
4.2.02.03	----ROADWAYS & PAVING	\$146,397	\$19,559	\$81,926	49.37%	\$247,882
4.2.03	---CONCRETE	\$2,209,884	\$295,240	\$1,236,689	49.37%	\$3,741,814
4.2.03.01	----RETRIEVAL FACILITY STRUCTURE CONCRETE	\$1,565,727	\$209,181	\$876,208	49.37%	\$2,651,117
4.2.03.02	---WASH BAY CONCRETE	\$26,077	\$3,484	\$14,593	49.37%	\$44,154
4.2.03.04	---MAIN SUPPORT BUILDING CONCRETE	\$529,862	\$70,790	\$296,520	49.37%	\$897,171
4.2.03.07	---CHARACTERIZATION AIRLOCK CONCRETE	\$88,218	\$11,786	\$49,368	49.37%	\$149,372
4.2.05	---METALS	\$13,071,979	\$1,746,416	\$7,315,226	49.37%	\$22,133,621
4.2.05.01	-----RETRIEVAL FACILITY STRUCTURE METALS	\$10,272,238	\$1,372,371	\$5,748,460	49.37%	\$17,393,069
4.2.05.01.01	-----RETRIEVAL FACILITY STRUCTURE STRUCTURAL STEEL	\$8,978,804	\$1,199,568	\$5,024,639	49.37%	\$15,203,012
4.2.05.01.02	-----RETRIEVAL FACILITY STRUCTURE MISC. METALS	\$1,293,434	\$172,803	\$723,820	49.37%	\$2,190,058
4.2.05.02	---WASH BAY METALS	\$322,626	\$43,103	\$180,545	49.37%	\$546,273
4.2.05.03	---CLEAN TRANSFER AIRLOCK METALS	\$119,192	\$15,924	\$66,701	49.37%	\$201,817
4.2.05.04	---MAIN SUPPORT BUILDING METALS	\$448,870	\$59,969	\$251,193	49.37%	\$760,031
4.2.05.05	-----HVAC ROOM METALS	\$1,084,509	\$144,890	\$606,903	49.37%	\$1,836,303
4.2.05.06	---PERSONNEL AIRLOCK METALS	\$138,785	\$18,542	\$77,666	49.37%	\$234,992
4.2.05.07	---CHARACTERIZATION AIRLOCK METALS	\$685,760	\$91,618	\$383,759	49.37%	\$1,161,136
4.2.08	---DOORS & WINDOWS	\$1,011,538	\$135,141	\$566,067	49.37%	\$1,712,747
4.2.08.01	---RETRIEVAL FACILITY STRUCTURE DOORS & WINDOWS	\$200,576	\$26,797	\$112,244	49.37%	\$339,617
4.2.08.04	---MAIN SUPPORT BLDG. DOORS & WINDOWS	\$310,962	\$41,545	\$174,018	49.37%	\$526,525
4.2.08.10	-----SPECIALTY DOORS	\$500,000	\$66,800	\$279,805	49.37%	\$846,605
4.2.09	---FINISHES	\$833,505	\$111,356	\$466,423	49.36%	\$1,411,284
4.2.09.04	---MAIN SUPPORT BUILDING FINISHES	\$186,155	\$24,870	\$104,171	49.36%	\$315,197

INEEL

Project Summary Report

Project Name: **OU-7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 1**
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency%</u>	<u>TOTAL</u>
4.2.09.10	----STRIPPABLE COATINGS	\$647,350	\$86,486	\$362,252	49.36%	\$1,096,087
4.2.10	---SPECIALTIES	\$125,263	\$16,735	\$70,103	49.37%	\$212,101
4.2.10.01	-----RETRIEVAL FACILITY STRUCTURE SPECIALTIES	\$125,263	\$16,735	\$70,103	49.37%	\$212,101
4.2.11	---EQUIPMENT	\$12,815	\$1,712	\$7,172	49.37%	\$21,699
4.2.11.01	-----WASH BAY EQUIPMENT	\$12,815	\$1,712	\$7,172	49.37%	\$21,699
4.2.13	---SPECIAL CONSTRUCTION	\$13,830,152	\$1,847,708	\$6,758,108	43.11%	\$22,435,967
4.2.13.01	----FACILITY MOCK-UP	\$2,606,000	\$348,162	\$1,273,423	43.11%	\$4,227,584
4.2.13.02	---STRUCTURE ERECTIONS	\$11,224,152	\$1,499,547	\$5,484,685	43.11%	\$18,208,383
4.2.13.02.01	ERECT FABRIC STRUCTURES	\$3,880,608	\$518,449	\$1,896,260	43.11%	\$6,295,317
4.2.13.02.02	-----ERECT LINER PANELS	\$7,343,544	\$981,097	\$3,588,425	43.11%	\$11,913,066
4.2.14	---CONVEYING SYSTEMS	\$96,124	\$12,842	\$53,793	49.37%	\$162,759
4.2.14.01	-----RETRIEVAL FACILITY STRUCTURE CONVEYING SYSTEMS	\$84,815	\$11,331	\$47,465	49.37%	\$143,611
4.2.14.04	-----MAIN SUPPORT BLDG. CONVEYING SYSTEMS	\$11,309	\$1,511	\$6,329	49.37%	\$19,148
4.2.15	---MECHANICAL	\$11,208,304	\$1,497,429	\$6,271,954	49.36%	\$18,977,688
4.2.15.01	----HVAC	\$6,707,718	\$896,151	\$3,753,512	49.36%	\$11,357,381
4.2.15.01.01	-----HVAC - DUCTWORK	\$5,580,778	\$745,592	\$3,122,898	49.36%	\$9,449,268
4.2.15.01.02	-----EXHAUST STACK	\$258,292	\$34,508	\$144,535	49.36%	\$437,336
4.2.15.01.03	EMISSIONS/VOC MONITORING	\$278,600	\$37,221	\$155,899	49.36%	\$471,720
4.2.15.01.04	HVAC -EQUIPMENT	\$177,939	\$23,773	\$99,572	49.36%	\$301,284
4.2.15.01.05	-----CHILLER PIPING & EQUIPMENT	\$412,108	\$55,058	\$230,608	49.36%	\$697,773
4.2.15.02	----FIRE PROTECTION	\$2,250,306	\$300,641	\$1,259,228	49.36%	\$3,810,175
4.2.15.02.01	-----RETRIEVAL PROJECT SYSTEM (RPS) FIRE SYSTEM CONTROLS	\$578,680	\$77,312	\$323,818	49.36%	\$979,810
4.2.15.02.02	-----RFS DRY PIPE FIRE PROTECTION	\$860,245	\$114,929	\$481,377	49.36%	\$1,456,551
4.2.15.02.04	-----RFS EXTRA HAZARD FOAM SYSTEM	\$618,905	\$82,686	\$346,327	49.36%	\$1,047,918
4.2.15.02.05	-----MAIN SUPPORT BUILDING DRY PIPE SYSTEM	\$116,880	\$15,615	\$65,404	49.36%	\$197,899

INEEL

Project Summary Report

Project Name: **OU-7-10 Staged Interim Action
Stage III Project- Retrieval System Project- Option 1**
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

<u>Level</u>	<u>Description</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
4.2.15.02.06	-----ADDITIONAL MAIN SUPPORT BUILDING FIRE PROTECTION SYSTEMS	\$44,936	\$6,003	\$25,145	49.36%	\$76,084
4.2.15.02.07	AIRLOCK TO CHARACTERIZATION FIRE PROTECTION	\$30,660	\$4,096	\$17,157	49.36%	\$51,913
4.2.15.03	----PLANT AIR	\$339,048	\$45,297	\$189,725	49.36%	\$574,070
4.2.15.04	-----BREATHING AIR	\$654,976	\$87,505	\$366,512	49.36%	\$1,108,993
4.2.15.05	---DUST SUPPRESSION	\$276,726	\$36,971	\$154,851	49.36%	\$468,547
4.2.15.06	---MISC. MECHANICAL	\$979,530	\$130,865	\$548,127	49.36%	\$1,658,522
4.2.16	---ELECTRICAL	\$11,792,253	51,575,445	\$5,762,843	43.11%	\$19,130,541
4.2.16.01	---GENERAL FACILITIES ELECTRICAL	\$6,242,472	\$833,994	\$3,050,680	43.11%	\$10,127,146
4.2.16.02	--ELECTRICAL SWITCH GEAR 8 PANEL BOARDS	\$437,998	\$58,516	\$214,048	43.11%	\$710,562
4.2.16.02.01	-----MAIN FEED CONDUITS AND CONDUCTORS	\$75,732	\$10,118	\$37,010	43.11%	\$122,859
4.2.16.02.02	TRANSFORMERS	\$79,734	\$10,652	\$38,966	43.11%	\$129,353
4.2.16.02.03	SITWORK	\$29,621	\$3,957	\$14,476	43.11%	\$48,054
4.2.16.02.04	SWITCHGEAR	\$233,022	\$31,132	\$113,877	43.11%	\$378,031
4.2.16.02.05	MISC. CONNECTIONS	\$7,132	\$953	\$3,485	43.11%	\$11,570
4.2.16.02.06	-----TESTING	\$12,757	\$1,704	\$6,234	43.11%	\$20,696
4.2.16.03	---MONITORING AND CONTROLS	\$1,470,870	\$196,508	\$718,810	43.11%	\$2,386,189
4.2.16.04	- ---CRITICALITY & RAD MONITORINGSYSTEMS INSTALLATION	\$76,904	\$10,274	\$37,583	43.11%	\$124,761
4.2.16.05	-----CCTV MONITORINGSYSTEM	\$226,032	\$30,198	\$110,461	43.11%	\$366,691
4.2.16.06	----INTEGRATIONCONTROLS SYSTEM	\$3,337,977	\$445,954	\$1,631,261	43.11%	\$5,415,191
6.0	TESTING & TURNOVER	\$7,318,420	\$1,176,802	\$6,099,474	71.80%	\$14,594,696
OPC3100	--TESTING AND TURNOVER PLANNING	\$212,128	\$34,110	\$176,796	71.80%	\$423,035
OPC3200	--S. O. TESTING	\$3,181,922	\$511,653	\$2,651,945	71.80%	\$6,345,521
OPC3300	--ORR SUPPORT	\$233,341	\$37,521	\$194,476	71.80%	\$465,338
OPC3400	--FACILITY ACCEPTANCE REVIEW	\$159,096	\$25,583	\$132,597	71.80%	\$317,276
OPC3500	--RADIOLOGICALCONTROL SUPPORT	\$116,670	\$18,761	\$97,238	71.80%	\$232,669

INEEL

Project Summary Report

Project Name: **OU-7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 1**
Project Location: **INEEL-RWMC**
Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

<u>Level</u>	<u>DescriDtion</u>	<u>Estimate Subtotal</u>	<u>Escalation</u>	<u>Continaency</u>	<u>Continaency %</u>	<u>TOTAL</u>
OPC3600	--OPERATOR TRAINING	\$2,121,281	\$341,102	\$1,767,963	71.80%	\$4,230,347
OPC3700	--OPERATING PROCEDURES	\$466,682	\$75,042	\$388,952	71.80%	\$930,676
OPC3800	--START-UP COORDINATION	\$137,883	\$22,172	\$114,918	71.80%	\$274,973
OPC3900	-- SPARES	\$689,416	\$110,858	\$574,588	71.80%	\$1,374,862
7.0	PROJECT MANAGEMENT	\$9,545,767	\$1,021,397	\$4,555,003	43.11%	\$15,122,167

Total	OU 7-10 STAGE III - RETRIEVAL SYSTEM PROJECT - OPTION #1	\$173,100,158	\$18,485,047	\$100,068,792	52.23%	\$291,653,997
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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
<u>1.01 ENVIRONMENTAL</u>												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE 111- LCB , estimate# 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
ENVIRONMENTAL		U.C. per \$					0	0	0	0	0.063	0.063
		106,064,074.00\$		0			\$0	\$0	50	\$0	56,671,430	56,671,430
Subtotal							\$0	\$0	50	50	\$6,671,430	56,671,430
Sales Tax							\$0	\$0	50	50	\$0	\$0
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	50	\$0
Subtotal Estimate												\$6,671,430
Escalation							\$0	\$0	\$0	\$0	\$541,053	5541,053
Contingency							\$0	\$0	\$0	\$0	\$3,108,824	\$3,108,824
--Total 1.01 ENVIRONMENTAL					0		\$0	\$0	\$0	\$0	\$10,321,307	\$10,321,307

1.02 SAFETY ANALYSIS

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

SAFETY ANALYSIS	U.C. per \$	0	0	0	0	0.01	0.01		
	106,064,074.00	\$	0	\$0	\$0	\$0	51,081,854	51,081,854	
Subtotal				\$0	\$0	50	50	51,081,854	51,081,854
Sales Tax				\$0	\$0	50	50	\$0	50
INEEUSubcontractorOverheads	0.00%			\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate									\$1,081,854
Escalation				\$0	\$0	50	50	587,738	587,738
Contingency				\$0	\$0	\$0	\$0	\$504,134	5504,134
--Total 1.02 SAFETY ANALYSIS			0	\$0	\$0	\$0	\$0	\$1,673,725	\$1,673,725

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1.03 SAFETY & HEALTH												
		<i>U.C. per \$</i>										
	SAFETY & HEALTH	106,064,074.00\$			0		\$0	\$0	\$0	\$0	\$1,940,973	\$1,940,973
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$1,940,973	\$1,940,973
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$1,940,973
	Escalation						\$0	\$0	\$0	\$0	\$157,413	\$157,413
	Contingency						\$0	\$0	\$0	\$0	\$904,475	\$904,475
<hr/>												
---Total	1.03 SAFETY & HEALTH				0		\$0	\$0	\$0	\$0	\$3,002,860	\$3,002,860

1.04 FIRE PROTECTION

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB. estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

		<i>U.C. per \$</i>										
	FIRE PROTECTION	106,064,074.00\$			0		\$0	\$0	\$0	\$0	\$159,096	\$159,096
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$159,096	\$159,096
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$159,096
	Escalation						\$0	\$0	\$0	\$0	\$12,903	\$12,903
	Contingency						\$0	\$0	\$0	\$0	\$74,137	\$74,137
<hr/>												
---Total	1.04 FIRE PROTECTION				0		\$0	\$0	\$0	\$0	\$246,136	\$246,136

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1.05 RADIOLOGICAL CONTROLS												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate# 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
	RADIOLOGICAL CONTROLS	U.C. per \$	106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$583,352	\$583,352
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$583,352	\$583,352
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$47,310	\$47,310
	Escalation						\$0	\$0	\$0	\$0	\$271,837	\$271,837
	Contingency						\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
--Total	1.05 RADIOLOGICAL CONTROLS				0		\$0	\$0	\$0	\$0	\$902,499	\$902,499

1.07 EMERGENCY PLANNING

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate# 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

	EMERGENCY PLANNING	U.C. per \$	106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$21,213	\$21,213
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$21,213	\$21,213
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$1,720	\$1,720
	Escalation						\$0	\$0	\$0	\$0	\$9,885	\$9,885
	Contingency						\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
---Total	1.07 EMERGENCY PLANNING				0		\$0	\$0	\$0	\$0	\$32,818	\$32,818

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
1.08 SAFEGUARDS & SECURITY												
Memo: Percentage of Construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB , estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.												
		U.C. per LS					0	0	0	0	100000	100000
SAFEGUARDS & SECURITY			1.00	LS	0		\$0	\$0	\$0	\$0	\$100,000	\$100,000
Memo. Per Dave Wilkins.												
Subtotal							\$0	\$0	\$0	\$0	\$100,000	\$100,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$100,000
Escalation							\$0	\$0	\$0	\$0	\$8,110	\$8,110
Contingency							\$0	\$0	\$0	\$0	\$46,599	\$46,599
---Total 1.08 SAFEGUARDS & SECURITY					0		\$0	\$0	\$0	\$0	\$154,709	\$154,709

1.09 QUALITY												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB , estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRUE Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.												
		U.C. per 5					0	0	0	0	0.03	0.03
QUALITY			106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$3,181,922	\$3,181,922
Subtotal							\$0	\$0	\$0	\$0	\$3,181,922	\$3,181,922
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$3,181,922
Escalation							\$0	\$0	\$0	\$0	\$258,054	\$258,054
Contingency							\$0	\$0	\$0	\$0	\$1,482,746	\$1,482,746
---Total 1.09 QUALITY					0		\$0	\$0	\$0	\$0	\$4,922,722	\$4,922,722

DETAIL ITEM REPORT

Project Name: OU-7-10 **Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
2.01 CONCEPTUAL DESIGN												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB , estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.												
	CONCEPTUAL DESIGN EFFORT	U.C. per \$	106,064,074.005		0		\$0	\$0	\$0	0.04	0	0.04
							\$0	\$0	\$0	\$4,242,563	50	\$4,242,563
<hr/>												
	Subtotal						\$0	\$0	\$0	\$4,242,563	\$0	\$4,242,563
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	50	\$0
<hr/>												
	Subtotal Estimate											\$4,242,563
	Escalation						50	\$0	\$0	\$110,307	50	\$110,307
	contingency						\$0	\$0	\$0	\$2,907,962	\$0	\$2,907,962
<hr/>												
---	Total 2.01 CONCEPTUAL DESIGN				0		\$0	\$0	\$0	\$7,260,832	\$0	\$7,260,832

2.02 PRELIMINARY DESIGN

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the **LCB** effort, **OU 7-10 PIT-9 STAGE III - LCB**, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.

	PRELIMINARY DESIGN	U.C. per \$	106,064,074.00	\$	0		\$0	\$0	\$0	0.06	0	0.06
							\$0	\$0	50	\$6,363,844	\$0	\$6,363,844
<hr/>												
	Subtotal						50	50	\$0	\$6,363,844	\$0	\$6,363,844
	Sales Tax						50	\$0	\$0	50	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	50	\$0
<hr/>												
	Subtotal Estimate											\$6,363,844
	Escalation						\$0	50	\$0	\$341,738	\$0	\$341,738
	Contingency						\$0	\$0	\$0	\$4,479,707	\$0	\$4,479,707
<hr/>												
---	Total 2.02 PRELIMINARY DESIGN				0		\$0	\$0	\$0	\$11,185,290	\$0	\$11,185,290

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
2.03 FINAL DESIGN												
		<i>U.C. per \$</i>										
	FINAL DESIGN	106,064,074.00 \$			0		\$0	\$0	\$0	\$0	\$1,111,016	\$10,606,407
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$10,606,407	\$10,606,407
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$10,606,407
	Escalation						\$0	\$0	\$0	\$0	\$860,180	\$860,180
	Contingency						\$0	\$0	\$0	\$0	\$7,660,326	\$7,660,326
<hr/>												
--Total 2.03 FINAL DESIGN					0		\$0	\$0	\$0	\$0	\$19,126,913	\$19,126,913

3.1 PROCUREMENT MANAGEMENT

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, **OU 7-10 PIT-9 STAGE III - LCB**, estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs.

		<i>U.C. per \$</i>										
	PROCUREMENT SUPPORT	106,064,074.00 \$			0		\$0	\$0	\$0	\$0	\$1,718,238	\$1,718,238
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$1,718,238	\$1,718,238
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$1,710,230
	Escalation						\$0	\$0	\$0	\$0	\$139,349	\$139,349
	Contingency						\$0	\$0	\$0	\$0	\$1,035,827	\$1,035,827
<hr/>												
---Total 3.1 PROCUREMENT MANAGEMENT					0		\$0	\$0	\$0	\$0	\$2,893,415	\$2,893,415

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Aostad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.01 RETRIEVAL EQUIPMENT												
<i>Memo: Equipment costs were provided by the BBWI Engineering group, estimate file contains these sheets with notes and basis of costs.</i>												
BH-1,2	BACKHOE	U.C. per EA	2.00	EA	0		0	0	485000	0	0	485000
							\$0	\$0	\$970,000	\$0	\$0	\$970,000
Memo:												
OHC-1,2	OVERHEAD CRANE	U.C. per EA	2.00	EA	0		0	0	700000	0	0	700000
							\$0	\$0	\$1,400,000	\$0	\$0	\$1,400,000
DH-1,2,3	DIRT HOPPER	U.C. per EA	3.00	EA	0		0	0	108333.33	0	0	108333.33
							\$0	\$0	\$325,000	\$0	\$0	\$325,000
ML-1,2	MAN-LIFT	U.C. per EA	2.00	EA	0		0	0	150000	0	0	150000
							\$0	\$0	\$300,000	\$0	\$0	\$300,000
CP-1	COMPACTOR	U.C. per EA	1.00	EA	0		0	0	220000	0	0	220000
							\$0	\$0	\$220,000	\$0	\$0	\$220,000
AGV-1,2	AUTOMATIC GUIDED VEHICLE	U.C. per EA	2.00	EA	0		0	0	225000	0	0	225000
							\$0	\$0	\$450,000	\$0	\$0	\$450,000
PT-1	PLATE TAMPER	U.C. per EA	1.00	EA	0		0	0	20000	0	0	20000
							\$0	\$0	\$20,000	\$0	\$0	\$20,000
RB-1-40	RETRIEVAL BOXES	U.C. per EA	40.00	EA	0		0	0	5750	0	0	5750
							\$0	\$0	\$230,000	\$0	\$0	\$230,000
UM-1,2	UTILITY MODULE	U.C. per EA	2.00	EA	0		0	0	500000	0	0	500000
							\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
DM-1,2	DECON MODULE	U.C. per EA	2.00	EA	0		0	0	300000	0	0	300000
							\$0	\$0	\$600,000	\$0	\$0	\$600,000
GM-1,2	GROUTING MODULE	U.C. per EA	2.00	EA	0		0	0	150000	0	0	150000
							\$0	\$0	\$300,000	\$0	\$0	\$300,000
DC-1,2	DIRT CHUTE	U.C. per EA	2.00	EA	0		0	0	75000	0	0	75000
							\$0	\$0	\$150,000	\$0	\$0	\$150,000

INEEL

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>3.2.01 RETRIEVAL EQUIPMENT</u>												
Memo: Equipment costs were provided by the BBWI Engineering group, estimate file contains these sheets with notes and basis of costs.												
CAM-I,32		<i>U.C. per LS</i>					0	0	700000	0	0	700000
CAMERA SYSTEM			1.00	LS	0		\$0	\$0	\$700,000	\$0	\$0	\$700,000
		<i>U.C. per LS</i>					0	0	20000	0	0	20000
SHIPPING FOR ABOVE EQUIPMENT			1.00	LS	0		\$0	\$0	\$20,000	\$0	\$0	\$20,000
Subtotal							\$0	\$0	\$6,685,000	\$0	\$0	\$6,685,000
Sales Tax							\$0	\$0	\$401,100	\$0	\$0	\$401,100
INEEL/Subcontractor Overheads		0.00%					\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$7,086,100
Escalation							\$0	\$0	\$574,683	\$0	\$0	\$574,683
Contingency							\$0	\$0	\$4,271,805	\$0	\$0	\$4,271,805
--Total 3.2.01 RETRIEVAL EQUIPMENT					0		\$0	\$0	\$11,932,587	\$0	\$0	\$11,932,507

3.2.02 WASH BAY EQUIPMENT

111791501410		<i>U.C. per Ea.</i>					0	0	16300	0	0	16300
Waste handling, for hazardous waste, 55 gal drum			1.00	Ea.	0		\$0	\$0	\$16,300	\$0	\$0	\$16,300
packer W/HEPA filter												
Memo: For load out of Wash Bay filter solids.												
		<i>U.C. per EA</i>					0	0	3700	0	0	3700
WASH BAY FILTER FEED PUMP			2.00	EA	0		\$0	\$0	\$7,400	\$0	\$0	\$7,400
Memo: Taken from estimate #2646 SBW Treatment - NGLW CslX Study. Actual equipment requirements are undefined at this point in the design development. Used the information from estimate #2646 as an allowance.												
		<i>U.C. per EA</i>					0	0	60000	0	0	60000
WASH BAY FILTER			2.00	EA	0		\$0	\$0	\$120,000	\$0	\$0	\$120,000
Memo: Taken from estimate #2646 SBW Treatment - NGLW CslX Study. Actual equipment requirements are undefined at this point in the design development. Used the information from estimate #2646 as an allowance.												

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.02 WASH BAY EQUIPMENT												
	SPRAY DECON SYSTEM -ALLOWANCE	<i>U.C. per LS</i>	1.00	LS	0		0 \$0	0 \$0	100000 \$100,000	0 \$0	0 \$0	100000 \$100,000
Subtotal							\$0	\$0	\$243,700	\$0	\$0	\$243,700
Sales Tax							\$0	\$0	\$14,622	\$0	\$0	\$14,622
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$258,322
Escalation							\$0	\$0	\$20,950	\$0	\$0	\$20,950
Contingency							\$0	\$0	\$155,728	\$0	\$0	\$155,728
---Total 3.2.02 WASH BAY EQUIPMENT					0		\$0	\$0	\$434,999	\$0	\$0	\$434,999

3.2.04 MSB/GLOVEBOX EQUIPMENT

	MAINT. BAY GLOVEBOX CRANE 2T REMOTE	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	130000 \$130,000	0 \$0	0 \$0	130000 \$130,000
Memo, Based on a vendor preliminary quote on a similar in-cell crane for another application. Received from American Crane, David Weber, on 4/25/03. Added \$5,000 to price for 2-ton model.												
Subtotal							\$0	\$0	\$130,000	\$0	\$0	\$130,000
Sales Tax							\$0	\$0	\$7,800	\$0	\$0	\$7,800
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$137,800
Escalation							\$0	\$0	\$11,176	\$0	\$0	\$11,176
Contingency							\$0	\$0	\$83,072	\$0	\$0	\$83,072
---Total 3.2.04 MSB/GLOVEBOX EQUIPMENT					0		\$0	\$0	\$232,047	\$0	\$0	\$232,047

3.2.05 FABRIC STRUCTURE - PROCUREMENT

Memo: Costs are based on information obtained from a fabric building fabricator, that also supplied the fabric building on the GEM project. This company understand the requirements at the INEEL.

	RETRIEVAL FACILITY STRUCTURE FABRIC COVERING ONLY	<i>U.C. per SF</i>	135,000.00	SF	0		0 \$0	0 \$0	11 \$1,485,000	0 \$0	0 \$0	11 \$1,485,000
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DETAIL ITEM REPORT

Project Name: *OU-7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 1*
Project Location: *INEEL-RWMC*
Estimate Number: *5974-2 Option 1-R*

Client: *S.L. Austad*
Prepared By: *S. N. Wasley/R. D. Adams*
Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.05 FABRIC STRUCTURE - PROCUREMENT												
<i>Memo: Costs are based on information obtained from a fabric building fabricator, that also supplied the fabric building on the GEM project. This company understand the requirements at the INEEL.</i>												
	SPECIALTY PERSONNEL BALANCING DOOR	<i>U.C. per EA</i>	12.00	EA	0		0	0	8000	0	0	8000
							\$0	\$0	\$96,000	\$0	\$0	\$96,000
	MAIN SUPPORT BUILDING- FRAME, FABRIC, & DOORS	<i>U.C. per SF</i>	31,200.00	SF	0		0	0	26.5	0	0	26.5
							\$0	\$0	\$826,800	\$0	\$0	\$826,800
	AIRLOCK CHARACTERIZATION STRUCTURE- FRAME, FABRIC	<i>U.C. per SF</i>	4,200.00	SF	0		0	0	30	0	0	30
							\$0	\$0	\$126,000	\$0	\$0	\$126,000
Subtotal							\$0	\$0	\$2,533,800	\$0	\$0	\$2,533,800
Sales Tax							\$0	\$0	\$152,028	\$0	50	\$152,028
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	50	50
Subtotal Estimate												\$2,605,828
Escalation							\$0	\$0	5217,821	\$0	50	\$217,821
Contingency							\$0	\$0	\$1,619,132	\$0	\$0	\$1,619,132
--Total 3.2.05 FABRIC STRUCTURE - PROCUREMENT					0		\$0	\$0	\$4,522,781	\$0	\$0	\$4,522,781

3.2.06 LINER PANELS - PROCUREMENT

Memo: Costs are based on a surface per square foot from the GEM facility. This structure is a special engineered and design structure. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containment area. This is the same concept as the GEM project, with the exception that the panels will be supported by the WES structure. This cost per surface SF includes windows for viewing and lighting.

	RETRIEVAL FACILITY STRUCTURE LINER PANELS	<i>U.C. per SSF</i>	134,316.00	SSF	0		0	0	116.24	0	0	116.24
							\$0	\$0	\$15,612,892	\$0	\$0	\$15,612,892
	WASH BAY STRUCTURE LINER PANELS	<i>U.C. per SSF</i>	4,066.00	SSF	0		0	0	116.24	0	0	116.24
							\$0	\$0	\$472,632	\$0	\$0	\$472,632
	CLEAN AIRLOCK TRANSFER STRUCTURE LINER PANELS	<i>U.C. per SSF</i>	3,611.00	SSF	0		0	0	116.24	0	0	116.24
							\$0	\$0	\$419,743	\$0	\$0	\$419,743
	HVAC ROOM STRUCTURE LINER PANELS (@ 50% OF HVAC ROOM)	<i>U.C. per SSF</i>	22,509.00	SSF	0		0	0	116.24	0	0	116.24
							\$0	\$0	\$2,616,446	\$0	\$0	\$2,616,446

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equip</u>	<u>Dment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.06 LINER PANELS- PROCUREMENT													
<i>Memo: Costs are based on a surface per square foot from the GEM facility. This structure is a special engineered and design structure. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containment area. This is the same concept as the GEM project, with the exception that the panels will be supported by the WES structure. This cost per surface SF includes windows for viewing and lighting.</i>													
	PERSONNEL AIRLOCK STRUCTURE LINER PANELS	U.C. per SSF	4,066.00	SSF	0		0	0		116.24	0	0	116.24
							\$0	\$0		\$472,632	\$0	\$0	\$472,632
	MAINTENANCE BAY GLOVE BOX STRUCTURE LINER PANELS	U.C. per SSF	5,215.00	SSF	0		0	0		116.24	0	0	116.24
							\$0	\$0		\$606,192	\$0	\$0	\$606,192
	AIRLOCK TO CHARACTERIZATION STRUCTURE LINER PANELS	U.C. per SSF	15,240.00	SSF	0		0	0		116.24	0	0	116.24
							\$0	\$0		\$1,771,498	\$0	\$0	\$1,771,498
Subtotal							\$0	\$0		\$21,972,034	\$0	\$0	\$21,972,034
Sales Tax							\$0	\$0		\$1,318,322	\$0	\$0	\$1,318,322
INEEUSubcontractorOverheads						0.00%	\$0	\$0		\$0	\$0	\$0	\$0
Subtotal Estimate													\$23,290,356
Escalation							\$0	\$0		\$1,888,848	\$0	\$0	\$1,888,848
Contingency							\$0	\$0		\$14,040,424	\$0	\$0	\$14,040,424
--Total 3.2.06 LINER PANELS- PROCUREMENT					0		\$0	\$0		\$39,219,628	\$0	\$0	\$39,219,628

3.2.07 PLANT AIR COMPRESSOR-PROCUREMENT

	PLANT ROTARY SCREW AIR COMPRESSOR 50 HP	U.C. per EA	1.00	EA	0		0	0		25000	0	0	25000
							\$0	\$0		\$25,000	\$0	\$0	\$25,000
<i>Memo. Costs are based on Richardson estimating manual for a 50 hp rotary screw type compressor including a 200 gallon tank, enclosed cabinet. For additional information see file cut sheet.</i>													
	FILTRATION SYSTEM FOR ABOVE COMPRESSOR	U.C. per EA	1.00	EA	0		0	0		2000	0	0	2000
							\$0	\$0		\$2,000	\$0	\$0	\$2,000

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **SL Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.07 PLANT AIR COMPRESSOR-PROCUREMENT												
	B. AIR COMPRESSOR TO BE PROVIDED BY BBWI EQUIPMENT POOL, NO COST TO PROJECT		1.00		0		\$0	\$0	\$0	0.01	\$0	0.01
												\$0
	Subtotal						\$0	\$0	\$27,000	\$0	\$0	\$27,000
	Sales Tax						\$0	\$0	\$1,620	\$0	\$0	\$1,620
	INEEL Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$28,620
	Escalation						\$0	\$0	\$2,321	\$0	\$0	\$2,321
	Contingency						\$0	\$0	\$17,253	\$0	\$0	\$17,253
--Total	3.2.07 PLANT AIR COMPRESSOR-PROCUREMENT				0		\$0	\$0	\$48,194	\$0	\$0	\$48,194

3.2.08 RADIOLOGICAL/CRITICALITY MONITORING EQUIP.-PROCUREMENT

	CRITICALITY MONITORING SYSTEM		3.00	EA	0		\$0	\$0	\$246,600	\$0	\$0	\$246,600
Memo: Costs are based on the GEM project, the gem project included one complete system. Based on assumption this project will require three complete systems. The complete system includes alarm system, panel boards, circuits, warning lights, and audible alarms.												
	RAD MONITORING EQUIPMENT, BASED ON THE EXACT EQUIPEMNT FROM GEM PROJECT		1.00	LS	0		\$0	\$0	\$444,200	\$0	\$0	\$444,200
Memo: This cost is based on the GEM project. Assume the same type of equipment and quantities will be required. The cost for the GEM project included updates to existing PMC's. New equipment included cams, air pumps, hand monitors, rad monitors, friskers, detectors, air samplers, etc.												
	Subtotal						\$0	\$0	\$690,800	\$0	\$0	\$690,800
	Sales Tax						\$0	\$0	\$41,448	\$0	\$0	\$41,448
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$732,248
	Escalation						\$0	\$0	\$59,385	\$0	\$0	\$59,385
	Contingency						\$0	\$0	\$441,430	\$0	\$0	\$441,430
--Total	3.2.08 RADIOLOGICAL/CRITICALITY MONITORING EQUIP.-PROCUREMENT				0		\$0	\$0	\$1,233,064	\$0	\$0	\$1,233,064

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs.</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.10 HVAC EQUIPMENT-PROCUREMENT												
	MIST ELIMINATOR	<i>U.C. per EA</i>	1.00	EA	0		0	0	48660	0	0	48660
							\$0	\$0	\$48,660	\$0	\$0	\$48,660
	DUST COLLECTOR (55,000 CFM)	<i>U.C. per EA</i>	3.00	EA	0		0	0	68000	0	0	68000
							\$0	\$0	\$204,000	\$0	\$0	\$204,000
	BLOWER 300 HP (110,000 CFM)	<i>U.C. per EA</i>	2.00	EA	0		0	0	137257	0	0	137257
							\$0	\$0	\$274,514	\$0	\$0	\$274,514
	BLOWER 150 HP (37,000CFM)	<i>U.C. per EA</i>	2.00	EA	0		0	0	26633	0	0	26633
							\$0	\$0	\$53,266	\$0	\$0	\$53,266
	VFD FOR 150 HP FAN MOTORS	<i>U.C. per EA</i>	2.00	EA	0		0	0	22400	0	0	22400
							\$0	\$0	\$44,800	\$0	\$0	\$44,800
	VFD FOR 300 HP FAN MOTORS	<i>U.C. per EA</i>	2.00	EA	0		0	0	33300	0	0	33300
							\$0	\$0	\$66,600	\$0	\$0	\$66,600
	WES PENTHOUSE (37,000 CFM)	<i>U.C. per EA</i>	1.00	EA	0		0	0	10000	0	0	10000
							\$0	\$0	\$10,000	\$0	\$0	\$10,000
	HEPA HOUSINGS 3H X 5W	<i>U.C. per EA</i>	2.00	EA	0		0	0	135000	0	0	135000
							\$0	\$0	\$270,000	\$0	\$0	\$270,000
	HEPA HOUSINGS 4H X 6W	<i>U.C. per EA</i>	2.00	EA	0		0	0	360000	0	0	360000
							\$0	\$0	\$720,000	\$0	\$0	\$720,000
	HEPA HOUSINGS 3H X 6W	<i>U.C. per EA</i>	1.00	EA	0		0	0	162000	0	0	162000
							\$0	\$0	\$162,000	\$0	\$0	\$162,000
	HEPA HOUSINGS DON/DOFT AREAS	<i>U.C. per EA</i>	4.00	EA	0		0	0	8000	0	0	8000
							\$0	\$0	\$32,000	\$0	\$0	\$32,000
	PLC CONTROL UNITS	<i>U.C. per EA</i>	2.00	EA	0		0	0	2500	0	0	2500
							\$0	\$0	\$5,000	\$0	\$0	\$5,000
	AIR COMPRESSOR (25HP)	<i>U.C. per EA</i>	1.00	EA	0		0	0	17500	0	0	17500
							\$0	\$0	\$17,500	\$0	\$0	\$17,500

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.1.0 HVAC EQUIPMENT-PROCUREMENT												
	DESSICANT DRYEWFILTER	<i>U.C. per EA</i>	1.00	EA	0		0	0	12983	0	0	12983
							\$0	\$0	\$12,983	\$0	\$0	\$12,983
	7 2 DIA DAMPERS (LEAK PROOF- SPECIALTY SST)	<i>U.C. per EA</i>	10.00	EA	0		0	0	25000	0	0	25000
							\$0	\$0	\$250,000	\$0	\$0	\$250,000
Subtotal							\$0	\$0	\$2,171,323	\$0	\$0	\$2,171,323
Sales Tax							\$0	\$0	\$130,279	\$0	\$0	\$130,279
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$2,301,602
Escalation							\$0	\$0	\$186,660	\$0	\$0	\$186,660
Contingency							\$0	\$0	\$1,387,505	\$0	\$0	\$1,387,505
—Total 3.2.10 HVAC EQUIPMENT-PROCUREMENT					0		\$0	\$0	\$3,075,767	\$0	\$0	\$3,075,767

3.2.1.1 CHILLER EQUIPMENT-PROCUREMENT

150 TON PACKAGED CHILLER	<i>U.C. per EA</i>	1.00	EA	0		0	0	150000	0	0	150000
						\$0	\$0	\$150,000	\$0	\$0	\$150,000
250 GALLON WATER TANK	<i>U.C. per EA</i>	1.00	EA	0		0	0	5000	0	0	5000
						\$0	\$0	\$5,000	\$0	\$0	\$5,000
BOILER/WATER HEATER 3000 MBH	<i>U.C. per EA</i>	1.00	EA	0		0	0	34000	0	0	34000
						\$0	\$0	\$34,000	\$0	\$0	\$34,000
5 HP PUMP	<i>U.C. per EA</i>	3.00	EA	0		0	0	4550	0	0	4550
						\$0	\$0	\$13,650	\$0	\$0	\$13,650
25 HP PUMP	<i>U.C. per EA</i>	1.00	EA	0		0	0	6511	0	0	6511
						\$0	\$0	\$6,511	\$0	\$0	\$6,511
VFD FOR 5 HP PUMP	<i>U.C. per EA</i>	1.00	EA	0		0	0	2810	0	0	2810
						\$0	\$0	\$2,810	\$0	\$0	\$2,810

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.2.11 CHILLER EQUIPMENT-PROCUREMENT												
	PLC CONTROLS UNITS	<i>U.C. per EA</i>	1.00	EA	0		0	0	2500	0	0	2500
							\$0	\$0	\$2,500	\$0	\$0	\$2,500
	3-WAY CONTROL VALVES	<i>U.C. per EA</i>	5.00	EA	0		0	0	4000	0	0	4000
							\$0	\$0	\$20,000	\$0	\$0	\$20,000
	MANUAL CONTROLS VALVES	<i>U.C. per EA</i>	28.00	EA	0		0	0	1200	0	0	1200
							\$0	\$0	\$33,600	\$0	\$0	\$33,600
	HEATER COIL 300 MBH	<i>U.C. per EA</i>	2.00	EA	0		0	0	1000	0	0	1000
							\$0	\$0	\$2,000	\$0	\$0	\$2,000
	HEATER COIL 420 MBH	<i>U.C. per EA</i>	1.00	EA	0		0	0	1400	0	0	1400
							\$0	\$0	\$1,400	\$0	\$0	\$1,400
	HEATER COIL 1000 MBH	<i>U.C. per EA</i>	2.00	EA	0		0	0	3500	0	0	3500
							\$0	\$0	\$7,000	\$0	\$0	\$7,000
Subtotal							\$0	\$0	\$278,471	\$0	\$0	\$278,471
Sales Tax							\$0	\$0	\$16,708	\$0	\$0	\$16,708
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$295,179
Escalation							\$0	\$0	\$23,939	\$0	\$0	\$23,939
Contingency							\$0	\$0	\$177,947	\$0	\$0	\$177,947
--Total 3.2.11 CHILLER EQUIPMENT-PROCUREMENT					0		\$0	\$0	\$497,065	\$0	\$0	\$497,065

3.3 BBWI MATERIAL HANDLING FEE

	PROCUREMENT FEE	<i>U.C. per \$</i>	36,816,055.00	\$	0		0	0	0	0	0.12	0.12
							\$0	\$0	\$0	\$0	\$4,417,927	\$4,417,927

DETAIL ITEM REPORT

Project Name: **OU-7-70 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S.N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
3.3 BBWI MATERIAL HANDLING FEE												
	G&A		U.C. per \$									
			4,417,927.00	\$	0		\$0	\$0	\$0	\$0	0.38	0.38
											\$1,678,812	\$1,678,812
	Subtotal						\$0	\$0	\$0	\$0	\$6,096,739	\$6,096,739
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$494,446	\$6,096,739
	Escalation						\$0	\$0	\$0	\$0	\$549,446	\$6,646,185
	Contingency						\$0	\$0	\$0	\$0	\$3,675,375	\$10,321,560
--Total 3.3 BBWI MATERIAL HANDLING FEE					0		\$0	\$0	\$0	\$0	\$10,266,560	\$10,266,560

4.1 CONSTRUCTION MANAGEMENT

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III - LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRUE Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.

	CONSTRUCTION MANAGMENT		U.C. per \$				\$0	\$0	\$0	\$0	0.07	0.07
			106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$7,424,485	\$7,424,485
	Subtotal						\$0	\$0	\$0	\$0	\$7,424,485	\$7,424,485
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads		0.00%				\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$991,911	\$7,424,485
	Escalation						\$0	\$0	\$0	\$0	\$4,154,892	\$11,579,377
	Continaency						\$0	\$0	\$0	\$0	\$0	\$4,154,892
--Total 4.1 CONSTRUCTION MANAGEMENT					0		\$0	\$0	\$0	\$0	\$12,571,289	\$12,571,289

4.2.01 GENERAL CONDITIONS

	SUPERVISION	GEN	U.C. per HRS		0.12	\$40.00	4.8	0	0	0	0	4.8
			549,909.00	HRS	65,989	CN-SUPR	\$2,639,563	\$0	\$0	\$0	\$0	\$2,639,563

Memo: @ 12% of labor hrs. Allow 55% of subcontract price as labor. Assume a \$40/hr rate to arrive at estimated labor hours included in subcontracted work.

INEEL

09/25/2003 15:46:05

Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01 GENERAL CONDITIONS												
	GEN	U.C. per \$					0	0	0	0.015	0	0.015
	Mobilization & Demobilization		22,493,380.00	\$	0	CN-SKWK	\$0	\$0	\$0	\$337,401	\$0	\$337,401
Memo: Mobilization/demobilization costs @ .6% of direct construction\$.												
	GEN	U.C. per HRS					0	4	0	0	0	4
	CONSTRUCTION EQUIPMENT ALLOWANCE		549,909.00	HRS	0		\$0	52,199,636	\$0	\$0	\$0	\$2,199,636
Memo: @ \$2.50/LABOR HOUR.												
	GEN	U.C. per \$					0	0	0.04	0	0	0.04
	SMALL TOOLS & CONSUMABLES		22,493,380.00	\$	0		\$0	\$0	\$899,735	\$0	\$0	\$899,735
Memo: @ 4% of construction labor \$.												
	GEN	U.C. per HRS			0.08	\$31.58	2.526	0	0	0	0	2.526
	GENERAL CLEANUP		549,909.00	HRS	43,993	CN-LABR	\$1,383,290	\$0	\$0	\$0	\$0	\$1,389,290
Memo: @ 8% of construction labor hours												
	GEN	U.C. per HRS			0.05	\$34.52	1.726	0	0	0	0	1.726
	CONDUCT OF OPERATIONS/CONDUCT OF MAINTENANCE		549,909.00	HRS	27,495	CN-SKWK	\$943,143	\$0	\$0	\$0	50	\$949,143
Memo: @ 5% of labor hours												
	GEN	U.C. per wks			40	\$70.00	2800	0	0	0	0	2800
	QA Manager		104.00	wks	4,160	CN-MGR	5291,200	\$0	\$0	\$0	\$0	\$291,200
	GEN	U.C. per wks			40	\$20.00	800	0	0	0	0	800
	QA Clerk		104.00	wks	4,160	CN-CLRK	\$83,200	\$0	50	50	\$0	\$83,200
	GEN	U.C. per wks			120	\$40.00	4800	0	0	0	0	4800
	QC Inspector (ave3 inspectors)		104.00	wks	12,480	CN-SUPR	\$499,200	\$0	\$0	\$0	\$0	\$499,200
	GEN	U.C. per wks			40		0	315.2	0	0	0	315.2
	QA/QC Pickup (1 pickup)		104.00	wks	4,160	00E2060	\$0	\$32,781	\$0	\$0	\$0	\$32,781
	GEN	U.C. per Wk			80	\$34.20	2736	1250	0	0	0	3986
	Craning Allowance - W/ Operator & Oiler		104.00	Wk	8,320	CN-ENGR	\$284,544	\$130,000	\$0	\$0	\$0	\$414,544

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.01 GENERAL CONDITIONS												
	GEN	U.C. per SF					0	0	0	75	0	75
	CONSTRUCTION WAREHOUSE		15,000.00	SF	0		\$0	\$0	\$0	\$1,125,000	\$0	\$1,125,000
Memo: Based on Means Facility Cost manual adjusted by our Nine-Block Matrix factors assuming a #6 or 7 on the Matrix												
Subtotal							\$6,136,140	\$2,362,417	\$899,735	\$1,462,401	\$0	\$10,860,693
Sales Tax							\$0	\$0	\$53,984	\$0	\$0	\$53,984
INEEL/Subcontractor Overheads							\$1,781,322	\$685,810	\$276,865	\$424,535	\$0	\$3,168,531
Subtotal Estimate												\$14,083,208
Escalation							\$1,057,773	\$407,243	\$164,406	\$252,095	\$0	\$1,881,517
Contingency							\$4,430,525	\$1,705,754	\$688,621	\$1,055,908	\$0	\$7,880,809
— Total 4.2.01 GENERAL CONDITIONS					166,597		\$13,405,759	\$5,161,224	\$2,083,611	\$3,194,939	\$0	\$23,845,533

4.2.02.01.01 Demo Lift Station Concrete

00E1012	GEN	U.C. per hr			1		0	97.41	0	0	0	97.47
Cat 330 1.75cy Hoe			80.00	hr	80	00E1012	\$0	\$7,313	\$0	\$0	\$0	\$7,313
00E2010	GEN	U.C. per hr			2		0	62.9	0	0	0	62.9
12 cy End Dump			80.00	hr	160	00E2010	\$0	\$5,032	\$0	\$0	\$0	\$5,032
CN-EQHV	GEN	U.C. per hr			1	\$35.49	35.49	0	0	0	0	35.49
Equipment Operators, Crane Or Shovel			80.00	hr	80	CN-EQHV	\$2,839	\$0	\$0	\$0	\$0	\$2,839
CN-TRHV	GEN	U.C. per hr			2	\$33.48	66.96	0	0	0	0	66.96
Truck Drivers, Heavy			80.00	hr	160	CN-TRHV	\$5,357	\$0	\$0	\$0	\$0	\$5,357

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.01.01 Demo Lift Station Concrete</u>												
CN-LABE	GEN	<i>U.C. per hr</i>			2	\$32.44	64.88	0	0	0	0	64.88
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES		80.00	hr	160	CN-LABE	\$5,190	\$0	\$0	\$0	\$0	\$5,190
Subtotal							\$13,386	\$12,345	\$0	\$0	\$0	\$25,731
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$3,886	\$3,584	\$0	\$0	\$0	\$7,470
Subtotal Estimate												\$33,201
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$8,527	\$7,863	\$0	\$0	\$0	\$16,390
— Total 4.2.02.01.01.01 Demo Lift Station Concrete					400		\$25,799	\$23,792	\$0	\$0	\$0	\$49,591

4.2.02.01.01.02 Demo Lift Station Electrical

00E1310	ELEC	<i>U.C. per hr</i>			1		0	68.68	0	0	0	68.68
	Grove RT522 20 tn HydraulicCrane		10.00	hr	10	00E1310	\$0	\$687	\$0	\$0	\$0	\$687
CN-EQHV	ELEC	<i>U.C. per hr</i>			1	\$35.49	35.49	0	0	0	0	35.49
	EquipmentOperators, Crane Or Shovel		10.00	hr	10	CN-EQHV	\$355	\$0	\$0	\$0	\$0	\$355
00E2040	ELEC	<i>U.C. per hr</i>			1		0	11.08	0	0	0	11.08
	15000lb GWW Flatbed		10.00	hr	10	00E2040	\$0	\$111	\$0	\$0	\$0	\$111
CN-TRHV	ELEC	<i>U.C. per hr</i>			1	\$33.48	33.48	0	0	0	0	33.48
	Truck Drivers, Heavy		10.00	hr	10	CN-TRHV	\$335	\$0	\$0	\$0	\$0	\$335
00E2060	ELEC	<i>U.C. per hr</i>			1		0	7.88	0	0	0	7.88
	3/4 tn 4x4 Pickup		40.00	hr	40	00E2060	\$0	\$315	\$0	\$0	\$0	\$315

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.01.02 Demo Lift Station Electrical</u>												
CN-ELEC	ELEC	<i>U.C. per hr</i>	40.00	hr	2 80	\$35.89 CN-ELEC	71.78 \$2,871	0 \$0	0 \$0	0 \$0	0 \$0	71.78 \$2,871
Subtotal							\$3,561	\$1,113	\$0	\$0	\$0	\$4,674
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$1,713	\$535	50	\$0	50	\$2,248
Subtotal Estimate												\$6,922
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$2,603	\$814	\$0	\$0	\$0	\$3,417
—Total					100		\$7,877	\$2,462	\$0	\$0	\$0	\$10,339

4.2.02.01.01.03 Demo Fire Pipe in Berm

00E1012	GEN	<i>U.C. per hr</i>	20.00	hr	1 20		0 \$0	91.41 \$1,828	0 \$0	0 \$0	0 \$0	91.41 \$1,828
Cat 330 1.75cy Hoe												
00E2010	GEN	<i>U.C. per hr</i>	20.00	hr	2 40		0 \$0	62.9 \$1,258	0 \$0	0 \$0	0 \$0	62.9 \$1,258
12 cy End Dump												
CN-EQHV	GEN	<i>U.C. per hr</i>	20.00	hr	1 20	\$35.49 CN-EQHV	35.49 5710	0 \$0	0 \$0	0 50	0 \$0	35.49 5710
Equipment Operators, Crane Or Shovel												
CN-TRHV	GEN	<i>U.C. per hr</i>	20.00	hr	2 40	\$33.48 CN-TRHV	66.96 \$1,339	0 \$0	0 \$0	0 \$0	0 \$0	66.96 \$1,339
Truck Drivers, Heavy												

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.01.01.03 Demo Fire Pipe in Berm												
CN-LABE	GEN	<i>U.C. per hr</i>			2	532.44	64.88	0	0	0	0	64.88
	LABORER EXCAVATION, BACKFILL, FOUNDATIONS, TRENCHES		20.00	hr	40	CN-LABE	\$1,298	50	50	\$0	\$0	\$1,298
Subtotal							53,347	\$3,086	\$0	50	\$0	\$6,433
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$972	\$896	\$0	\$0	\$0	\$1,867
Subtotal Estimate												\$8,300
Escalation							\$0	\$0	\$0	50	50	\$0
Contingency							\$2,132	\$1,966	\$0	\$0	\$0	\$4,097
---Total 4.2.02.01.01.03 Demo Fire Pipe in Berm					100		\$6,450	\$5,948	\$0	\$0	\$0	\$12,398

4.2.02.01.01.04 Excavate New Basin

00E1012	GEN	<i>U.C. per hr</i>			1		0	91.41	0	0	0	91.41
	Cat 330 1.75 cy Hoe		60.00	hr	60	00E1012	\$0	\$5,485	\$0	\$0	\$0	\$5,485
CN-EQHV	GEN	<i>U.C. per hr</i>			1	\$35.49	35.49	0	0	0	0	35.49
	Equipment Operators, Crane Or Shovel		60.00	hr	60	CN-EQHV	\$2,129	50	\$0	50	\$0	\$2,129
00E2010	GEN	<i>U.C. per hr</i>			2		0	62.9	0	0	0	62.9
	12 cy End Dump		60.00	hr	120	00E2010	\$0	\$3,774	50	50	\$0	53.774

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>DescriDtion</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.01.01.04 Excavate New Basin												
CN-TRHV	Truck Drivers, Heavy	GEN	U.C. per hr		2	\$33.48	66.96	0	0	0	0	66.96
			60.00	hr	120	CN-TRHV	\$4,018	\$0	\$0	\$0	\$0	\$4,018
Subtotal							\$6,147	\$9,259	\$0	\$0	\$0	\$15,406
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$1,784	\$2,688	\$0	\$0	\$0	\$4,472
Subtotal Estimate												\$19,070
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$3,915	\$5,897	\$0	\$0	\$0	\$9,813
—Total	4.2.02.01.01.04	Excavate New Basin			180		\$11,047	\$17,044	\$0	\$0	\$0	\$29,691

4.2.02.01.01.05 Relocate North Berm

00E1012	Cat 330 1.75 cy Hoe	GEN	U.C. per hr									
			240.00	hr	1		0	91.41	0	0	0	91.41
					240	00E1012	\$0	\$21,938	\$0	\$0	\$0	\$21,938
00E0610	Cat 815 Sheepsfoot	GEN	U.C. per hr									
			240.00	hr	1		0	75.65	0	0	0	75.65
					240	00E0610	\$0	\$18,156	\$0	\$0	\$0	\$18,156
00E0962	Cat D7 Dozer	GEN	U.C. per hr									
			240.00	hr	1		0	86.72	0	0	0	86.72
					240	00E0962	\$0	\$20,813	\$0	\$0	\$0	\$20,813
CN-EQHV	Equipment Operators, Crane Or Shovel	GEN	U.C. per hr									
			240.00	hr	3	\$35.49	106.47	0	0	0	0	106.47
					720	CN-EQHV	\$25,553	\$0	\$0	\$0	\$0	\$25,553
00E2010	12 cy End Dump	GEN	U.C. per hr									
			240.00	hr	2		0	62.9	0	0	0	62.9
					480	00E2010	\$0	\$15,096	\$0	\$0	\$0	\$15,096

DETAIL ITEM REPORT

Project Name: OU-7-10 **Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.01.05 Relocate North Berm</u>												
CN-TRHV	Truck Drivers, Heavy	GEN	240.00	hr	480	U.C. per hr \$33.48 CN-TRHV	66.96 \$16,070	0 \$0	0 \$0	0 \$0	0 \$0	66.96 \$16,070
Subtotal							\$41,623	\$76,003	\$0	\$0	\$0	\$117,626
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$12,083	\$22,064	\$0	\$0	\$0	\$34,147
Subtotal Estimate												\$151,773
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$26,513	\$48,412	\$0	\$0	\$0	\$74,924
---Total 4.2.02.01.01.05 Relocate North Berm					1,200		\$80,219	\$146,479	\$0	\$0	\$0	\$226,698
<u>4.2.02.01.01.06 Ex & Backfill Discharge Pipe</u>												
00E1012	Cat 330 1.75 cy Hoe	GEN	30.00	hr	30	U.C. per hr \$0	0 \$0	91.41 \$2,742	0 \$0	0 \$0	0 \$0	91.41 \$2,742
00E0610	Cat 815 Sheepsfoot	GEN	30.00	hr	30	U.C. per hr \$0	0 \$0	75.65 \$2,270	0 \$0	0 \$0	0 \$0	75.65 \$2,270
CN-EQHV	Equipment Operators, Crane Or Shovel	GEN	30.00	hr	60	U.C. per hr \$35.49 CN-EQHV	70.98 \$2,129	0 \$0	0 \$0	0 \$0	0 \$0	70.98 \$2,129
Subtotal							\$2,129	\$5,012	\$0	\$0	\$0	\$7,141
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$618	\$1,455	\$0	\$0	\$0	\$2,073
Subtotal Estimate												\$9,214
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$1,356	\$3,192	\$0	\$0	\$0	\$4,549
--Total 4.2.02.01.01.06 Ex & Backfill Discharge Pipe					60		\$4,104	\$9,659	\$0	\$0	\$0	\$13,763

DETAIL ITEM REPORT

Project Name: ***OU-7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 1***
Project Location: ***INEEL-RWMC***
Estimate Number: ***5974-2 Option 1-R***

Client: **S.L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

Code	Description	Contractor	Qnty	UOM	Hrs	Resource	Labor	Equip	Material	Subcontractor	Other	TOTAL
4.2.02.01.02.01	Concrete Lift Station											
	Fine Grade	GEN	U.C. per sf	80.00	sf	0.18	\$31.58 CN-LABR	3.158 \$253	0.02 \$2	0 \$0	0 \$0	3.178 \$254
	Form & Strip	GEN	U.C. per sf	720.00	sf	0.2144	\$37.16 CN-CARC	7.432 \$5,351	1.35 \$972	0 \$0	0 \$0	8.782 \$6,323
	Place Rebar	GEN	U.C. per lb	1,440.00	lb	0.01217	\$43.50 CN-IRON	0.522 \$752	0.05 \$72	0.35 \$504	0 \$0	0.922 \$1,328
	Place Concrete	GEN	U.C. per cy	12.00	cy	0.56	\$31.58 CN-LABR	15.79 \$189	0 \$0	100 \$1,200	0 \$0	115.79 \$1,389
	Screed Concrete	GEN	U.C. per sf	160.00	sf	0.0061	\$31.58 CN-LABR	0.19 \$30	0.02 \$3	0 \$0	0 \$0	0.21 \$34
	Trowel Concrete	GEN	U.C. per sf	160.00	sf	0.0152	\$31.58 CN-LABR	0.474 \$76	0.08 \$13	0 \$0	0 \$0	0.554 \$89
	Cure Concrete	GEN	U.C. per sf	880.00	sf	0.019	\$31.58 CN-LABR	0.316 \$278	0.06 \$53	0 \$0	0 \$0	0.376 \$331
	Embeds	GEN	U.C. per lb	1,000.00	lb	0.0880	\$37.16 CN-CARC	2.973 \$2,973	0 \$0	3 \$3,000	0 \$0	5.973 \$5,973
	Subtotal							\$9,902	\$1,114	\$4,704	\$0	\$15,720
	Sales Tax							\$0	\$0	\$282	\$0	\$282
	INEEUSubcontractorOverheads	29.03%						\$2,874	\$324	\$1,448	\$0	\$4,645
	Subtotal Estimate											\$20,648
	Escalation							\$0	\$0	\$0	\$0	\$0
	Contingency							\$6,307	\$710	\$3,176	\$0	\$10,193
---Total	4.2.02.01.02.01 Concrete Lift Station					267		\$19,083	\$2,140	\$9,610	\$0	\$30,843

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.01.02.02 Ductbank Concrete												
	Form & Strip	GEN			0.18	\$37.16	6.689	1.35	0	0	0	8.039
			200.00	sf	36	CN-CARC	\$1,338	\$270	\$0	\$0	\$0	\$1,608
	Place Rebar	GEN			0.012	\$43.50	0.522	0.05	0.35	0	0	0.922
			420.00	lb	5	CN-IRON	\$219	\$21	\$147	\$0	\$0	\$387
	Place Concrete	GEN			2	\$31.58	63.16	0	100	0	0	163.16
			6.00	cy	12	CN-LABR	\$379	\$0	\$600	\$0	\$0	\$979
Subtotal							\$1,936	\$291	\$747	\$0	\$0	\$2,974
Sales Tax							\$0	\$0	\$45	\$0	\$0	\$45
INEEUSubcontractorOverheads							\$562	\$84	\$230	\$0	\$0	\$876
Subtotal Estimate												\$3,895
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$1,233	\$185	\$504	\$0	\$0	\$1,923
---Total 4.2.02.01.02.02 Ductbank Concrete					53		\$3,731	\$561	\$1,526	\$0	\$0	\$5,010

4.2.02.01.05 METALS

Grating	STEEL	U.C. per sf	40.00	sf	0.3	\$43.50	13.05	0	5	0	0	18.05
					12	CN-IRON	\$522	\$0	\$200	\$0	\$0	\$722

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage 111 Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **SL Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>		
<u>4.2.02.01.05METALS</u>														
	Gates	STEEL	U.C. per ea	2.00	ea	15 30	\$43.50 CN-IRON	652.5 \$1,305	0 \$0	1000 \$2,000	0 \$0	0 \$0	1652.5 \$3,305	
Subtotal								\$1,827	\$0	\$2,200	\$0	\$0	\$4,027	
Sales Tax								\$0	\$0	\$132	\$0	\$0	\$132	
INEEL/Subcontractor Overheads								41.93%	\$766	\$0	\$978	\$0	\$0	\$1,744
Subtotal Estimate													\$5,903	
Escalation								\$0	\$0	\$0	\$0	\$0	\$0	
Contingency								\$1,280	\$0	\$1,634	\$0	\$0	\$2,914	
---Total 4.2.02.01.05METALS					42		\$3,073	\$0	\$4,944	\$0	\$0	\$8,817		

4.2.02.01.15MECHANICAL

6" Pipe	PIPE	U.C. per lf	20.00	lf	0.75 15	\$39.33 CN-PIPE	29.498 \$590	0 \$0	30 \$600	0 \$0	0 \$0	59.498 \$1,190
Pipe Supports	PIPE	U.C. per ea	10.00	ea	2 20	\$39.33 CN-PIPE	78.66 \$787	0 \$0	10 \$100	0 \$0	0 \$0	88.66 \$887
Totalizer	PIPE	U.C. per ea	1.00	ea	2 2	\$39.33 CN-PIPE	78.66 \$79	0 \$0	2000 \$2,000	0 \$0	0 \$0	2078.66 \$2,079

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.15 MECHANICAL</u>												
	3 0 CMP Discharge Pipe	PIPE	400.00	If	0.3 120	\$39.33 CN-PIPE	11.799 \$4,720	0 \$0	14 \$5,600	0 \$0	0 \$0	25.799 \$10,320
Subtotal							\$6,175	\$0	\$8,300	\$0	\$0	\$14,475
Sales Tax							\$0	\$0	\$498	\$0	\$0	\$498
INEEUSubcontractorOverheads							\$2,970	\$0	\$4,232	\$0	\$0	\$7,203
Subtotal Estimate												\$22,175
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$4,515	\$0	\$6,432	\$0	\$0	\$10,947
--Total 4.2.02.01.15 MECHANICAL					157		\$13,660	\$0	\$19,463	\$0	\$0	\$33,122

4.2.02.01.16.01 Switchgear & Transformers

	Fused Disc Switch, 480 volt 3R disc	ELEC	1.00	Ea	2 2	\$35.89 CN-ELEC	71.78 \$72	0 \$0	550 \$550	0 \$0	0 \$0	621.78 \$622
Memo: Panel pricing is based on GE Buy Log												
Subtotal							\$72	\$0	\$550	\$0	\$0	\$622
Sales Tax							\$0	\$0	\$33	\$0	\$0	\$33
INEEUSubcontractorOverheads							\$35	\$0	\$280	\$0	\$0	\$315
Subtotal Estimate												\$970
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$52	\$0	\$426	\$0	\$0	\$479
--Total 4.2.02.01.16.01 Switchgear & Transformers					2		\$159	\$0	\$1,290	\$0	\$0	\$1,440

4.2.02.01.16.02 Raceways& Fittinas

	1" GRS conduit	ELEC	20.00	Lf	0.15 3	\$35.89 CN-ELEC	5.384 \$108	0 \$0	1.35 \$27	0 \$0	0 \$0	6.734 \$135
	1" LB w/GASK and Cover	ELEC	2.00	Ea	0.35 1	\$35.89 CN-ELEC	12.56 \$25	0 \$0	12 \$24	0 \$0	0 \$0	24.56 \$49

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.16.02 Raceways & Fittings</u>												
	1" LTF Conduit	ELEC	<i>U.C. per lf</i>		<i>0.2</i>	<i>\$35.89</i>	<i>7.178</i>	<i>0</i>	<i>2.5</i>	<i>0</i>	<i>0</i>	<i>9.678</i>
			10.00	lf	2	CN-ELEC	\$72	\$0	\$25	\$0	\$0	\$97
	2 rigid conduit	ELEC	<i>U.C. per Lf</i>		<i>0.1</i>	<i>\$35.89</i>	<i>3.589</i>	<i>0</i>	<i>2.75</i>	<i>0</i>	<i>0</i>	<i>6.339</i>
			200.00	Lf	20	CN-ELEC	\$718	\$0	\$550	\$0	\$0	\$1,268
	2" spacers	ELEC	<i>U.C. per Ea</i>		<i>0.1</i>	<i>\$35.89</i>	<i>3.589</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>4.589</i>
			20.00	Ea	2	CN-ELEC	\$72	\$0	\$20	\$0	\$0	\$92
	P-1000 Unistrut	ELEC	<i>U.C. per Lf</i>		<i>0.12</i>	<i>\$35.89</i>	<i>4.307</i>	<i>0</i>	<i>3.5</i>	<i>0</i>	<i>0</i>	<i>7.807</i>
			20.00	Lf	2	CN-ELEC	\$86	\$0	\$70	\$0	\$0	\$1 56
	P-1000 Unistrut fittings, allowance	ELEC	<i>U.C. per Ls</i>		<i>4</i>	<i>\$35.89</i>	<i>143.56</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>0</i>	<i>193.56</i>
			1.00	Ls	4	CN-ELEC	\$144	\$0	\$50	\$0	\$0	\$194
Subtotal							\$1,224	\$0	\$766	\$0	\$0	\$1,990
Sales Tax							\$0	\$0	\$46	\$0	\$0	\$46
INEEUSubcontractorOverheads							\$589	\$0	\$391	\$0	\$0	\$979
Subtotal Estimate												\$3,015
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$895	\$0	\$594	\$0	\$0	\$1,488
---Total	4.2.02.01.16.02 Raceways& Fittings				34		\$2,707	\$0	\$1,796	\$0	\$0	\$4,504

4.2.02.01.16.03 Conductors & Grounding

	#2 bare copper	ELEC	<i>U.C. per Lf</i>		<i>0.02</i>	<i>\$35.89</i>	<i>0.718</i>	<i>0</i>	<i>0.35</i>	<i>0</i>	<i>0</i>	<i>1.068</i>
			250.00	Lf	5	CN-ELEC	\$1 79	\$0	\$88	\$0	\$0	\$267
	#8 thhn copper wire	ELEC	<i>U.C. per Lf</i>		<i>0.012</i>	<i>\$35.89</i>	<i>0.431</i>	<i>0</i>	<i>0.13</i>	<i>0</i>	<i>0</i>	<i>0.561</i>
			1,000.00	Lf	12	CN-ELEC	\$431	\$0	\$1 30	\$0	\$0	\$561
	Allowance for jet-line, tru tape, pull rope	ELEC	<i>U.C. per Ls</i>		<i>4</i>	<i>\$35.89</i>	<i>143.56</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>0</i>	<i>193.56</i>
			1.00	Ls	4	CN-ELEC	\$144	\$0	\$50	\$0	\$0	\$1 94

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.02.01.16.03 Conductors & Grounding</u>												
	Terminations	ELEC			0.25	\$35.89	8.973	0	0.5	0	0	9.473
		U.C. per ea	20.00	ea	5	CN-ELEC	\$179	\$0	\$10	\$0	\$0	\$189
Subtotal							\$933	\$0	\$278	\$0	\$0	\$1,211
Sales Tax							\$0	\$0	\$17	\$0	\$0	\$17
INEEUSubcontractorOverheads							\$449	\$0	\$141	\$0	\$0	\$590
Subtotal Estimate												\$1,810
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$682	\$0	\$215	\$0	\$0	\$897
--Total 4.2.02.01.16.03 Conductors & Grounding					26		\$2,064	\$0	\$651	\$0	\$0	\$2,715

4.2.02.01.16.04 Testing

	Testing of systems and equipment	ELEC			30	\$35.89	1076.7	0	0	0	0	1076.7
		U.C. per Ls	1.00	Ls	30	CN-ELEC	\$1,077	\$0	\$0	\$0	\$0	\$1,077
Subtotal							\$1,077	\$0	\$0	\$0	\$0	\$1,077
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$518	\$0	\$0	\$0	\$0	\$518
Subtotal Estimate												\$1,595
Escalation							\$0	\$0	\$0	\$0	\$0	\$0
Contingency							\$787	\$0	\$0	\$0	\$0	\$787
--Total 4.2.02.01.16.04 Testing					30		\$2,382	\$0	\$0	\$0	\$0	\$2,382

4.2.02.02.01 RETRIEVAL FACILITY STRUCTURE EARTHWORK

	FOUNDATION EXCAVATION	DIRT			0		0	0	0	3.51	0	3.51
		U.C. per CY	6,200.00	CY			\$0	\$0	\$0	\$21,762	\$0	\$21,762
	FOUNDATION BACKFILL& COMPACT	DIRT			0		0	0	0	13.87	0	13.87
		U.C. per CY	5,735.00	CY			\$0	\$0	\$0	\$79,544	\$0	\$79,544

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project* Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.02.01 RETRIEVAL FACILITY STRUCTURE EARTHWORK												
	DIRT	<i>U.C. per CY</i>					0	0	0	3.51	0	3.51
	OVERBURDEN STAGING PIT EXCAVATION		3,513.00	CY	0		\$0	\$0	\$0	\$12,331	\$0	\$12,331
	DIRT	<i>U.C. per CY</i>					0	0	0	13.87	0	13.87
	PIT BACKFILL & COMPACT		597.00	CY	0		\$0	\$0	\$0	\$8,280	\$0	\$8,280
	DIRT	<i>U.C. per CY</i>					0	0	0	7.8	0	1.8
	SPREADEXCESSEXCAVATEDMATERIAL		3,480.00	CY	0		\$0	\$0	\$0	\$6,264	\$0	\$6,264
	PILING	<i>U.C. per SF</i>			0.095	\$37.43	3.555	4.674	15.38	0	0	23.609
	SHEET PILING		7,875.00	SF	748	B40	\$28,000	\$36,804	\$121,118	\$0	\$0	\$185,921
	PILING	<i>U.C. per LS</i>			142	\$37.43	5314.53	4881.69	0	0	0	10196.22
	SHEET PILING • MOB/DEMOB		1.00	LS	142	B40 MOB	\$5,315	\$4,882	\$0	\$0	\$0	\$10,196
Subtotal							\$33,314	\$41,686	\$121,118	\$128,181	\$0	\$324,299
Sales Tax							\$0	\$0	\$7,267	\$0	\$0	\$7,267
INEEUSubcontractorOverheads							\$13,970	\$17,480	\$53,835	\$53,750	\$0	\$139,036
Subtotal Estimate												\$470,601
Escalation							\$6,317	\$7,905	\$24,345	\$24,306	\$0	\$62,872
Contingency							\$26,460	\$33,110	\$101,972	\$101,811	\$0	\$263,354
—Total 4.2.02.02.01 RETRIEVAL FACILITY STRUCTURE EARTHWORK					890		\$80,061	\$100,180	\$308,537	\$308,049	\$0	\$796,828

4.2.02.02.02 WASH BAY EARTHWORK

	DIRT	<i>U.C. per CY</i>					0	0	0	3.51	0	3.51
	FOUNDATION EXCAVATION		324.00	CY	0		\$0	\$0	\$0	\$1,137	\$0	\$1,137
	DIRT	<i>U.C. per CY</i>					0	0	0	13.87	0	13.87
	FOUNDATION BACKFILL & COMPACT		119.00	CY	0		\$0	\$0	\$0	\$1,651	\$0	\$1,651

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.02.02 WASH BAY EARTHWORK												
	DIRT	<i>U.C. per CY</i>										
	SPREAD EXCESS EXCAVATED MATERIAL		205.00	CY	0		\$0	\$0	\$0	1.8	\$0	1.8
							\$0	\$0	\$0	\$369	\$0	\$369
Subtotal							\$0	\$0	\$0	\$3,157	\$0	\$3,157
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$1,324	\$0	\$1,324
Subtotal Estimate												\$4,480
Escalation							\$0	\$0	\$0	\$599	\$0	\$599
Contingency							\$0	\$0	\$0	\$2,507	\$0	\$2,507
---Total 4.2.02.02.02 WASH BAY EARTHWORK					0		\$0	\$0	\$0	\$7,586	\$0	\$7,586
4.2.02.02.04 MAIN SUPPORT BUILDING EARTHWORK												
	DIRT	<i>U.C. per CY</i>										
	FOUNDATION EXCAVATION		1,938.00	CY	0		\$0	\$0	\$0	3.51	\$0	3.51
							\$0	\$0	\$0	\$6,802	\$0	\$6,802
	DIRT	<i>U.C. per CY</i>										
	FOUNDATION BACKFILL & COMPACT		205.00	CY	0		\$0	\$0	\$0	13.87	\$0	13.87
							\$0	\$0	\$0	\$2,843	\$0	\$2,843
	DIRT	<i>U.C. per CY</i>										
	SPREAD EXCESS EXCAVATED MATERIAL		1,733.00	CY	0		\$0	\$0	\$0	1.8	\$0	1.8
							\$0	\$0	\$0	\$3,119	\$0	\$3,119
Subtotal							\$0	\$0	\$0	\$12,765	\$0	\$12,765
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$5,353	\$0	\$5,353
Subtotal Estimate												\$18,118
Escalation							\$0	\$0	\$0	\$2,421	\$0	\$2,421
Contingency							\$0	\$0	\$0	\$10,139	\$0	\$10,139
--Total 4.2.02.02.04 MAIN SUPPORT BUILDING EARTHWORK					0		\$0	\$0	\$0	\$30,677	\$0	\$30,677

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.02.07CHARACTERIZATIONAIRLOCK EARTHWORK												
	FOUNDATION DIRT EXCAVATION	U.C. per CY	1.024	CY	0		\$0	\$0	\$0	3.51 \$3,594	0 \$0	3.51 \$3,594
	FOUNDATION DIRT BACKFILL & COMPACT	U.C. per CY	943	CY	0		\$0	\$0	\$0	13.87 \$13,079	0 \$0	13.87 \$13,079
	SPREAD EXCESS EXCAVATED MATERIAL	U.C. per CY	81	CY	0		\$0	\$0	\$0	1.8 \$146	0 \$0	1.8 \$146
Subtotal							\$0	\$0	\$0	\$16,819	\$0	\$16,819
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$7,053	\$0	\$7,053
Subtotal Estimate												\$23,072
Escalation							\$0	\$0	\$0	\$3,189	\$0	\$3,189
Contingency							\$0	\$0	\$0	\$13,359	\$0	\$13,359
—Total 4.2.02.02.07CHARACTERIZATIONAIRLOCK EARTHWORK					0		\$0	\$0	\$0	\$40,421	\$0	\$40,421

4.2.02.03ROADWAYS & PAVING

4" ASPHALT PAVING	GEN	U.C. per TN	816	TN	0		\$0	\$0	\$0	80 \$65,280	0 \$0	80 \$65,280
LEVELING COURSE/CRUSHED GRAVEL	GEN	U.C. per CYD	690	CYD	0		\$0	\$0	\$0	35 \$24,150	0 \$0	35 \$24,150

DETAIL ITEM REPORT

Project Name: OU-7-10 **Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.02.03 ROADWAYS& PAVING												
	PIT RUN FILL	GEN	<i>U.C. per CYD</i>									
			1,602.00	CYD	0		\$0	\$0	\$0	15	\$0	15
							\$0	\$0	\$0	\$24,030	\$0	\$24,030
Subtotal							\$0	\$0	\$0	\$113,460	\$0	\$113,460
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$32,937	\$0	\$32,937
Subtotal Estimate												\$146,397
Escalation							\$0	\$0	\$0	\$19,559	\$0	\$19,559
Contingency							\$0	\$0	\$0	\$81,926	\$0	\$81,926
—Total 4.2.02.03 ROADWAYS& PAVING					0		\$0	\$0	\$0	\$247,082	\$0	\$247,002

4.2.03.01 RETRIEVAL FACILITY STRUCTURE CONCRETE

	FOUNDATION WALLS	GEN	<i>U.C. per CY</i>				0	0	0	430	0	430
			260.00	CY	0		\$0	\$0	\$0	\$111,800	\$0	\$111,800
	COLUMN FOOTINGS	GEN	<i>U.C. per CY</i>				0	0	0	430	0	430
			179.00	CY	0		\$0	\$0	\$0	\$76,970	\$0	\$76,970
	EXISTING RAIL FDN. TOPPING	GEN	<i>U.C. per CY</i>				0	0	0	430	0	430
			541.00	CY	0		\$0	\$0	\$0	\$232,630	\$0	\$232,630
	FLOORS	GEN	<i>U.C. per CY</i>				0	0	0	430	0	430
			629.00	CY	0		\$0	\$0	\$0	\$270,470	\$0	\$270,470
	AGV TRACK	GEN	<i>U.C. per CY</i>				0	0	0	430	0	430
			577.00	CY	0		\$0	\$0	\$0	\$248,110	\$0	\$248,110

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOT L</u>
4.2.03.01 RETRIEVAL FACILITY STRUCTURE CONCRETE												
	OVERBURDEN STAGING PIT WALLS & BASE SLAB	GEN U.C. per CY	636.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$273,480	0 \$0	430 \$273,480
Subtotal							\$0	\$0	\$0	\$1,213,460	\$0	\$1,213,460
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$352,267	\$0	\$352,267
Subtotal Estimate												\$1,565,727
Escalation							\$0	\$0	\$0	\$209,181	\$0	\$209,181
Contingency							\$0	\$0	\$0	\$876,208	\$0	\$876,208
--Total 4.2.03.01 RETRIEVAL FACILITY STRUCTURE CONCRETE					0		\$0	\$0	\$0	\$2,651,117	\$0	\$2,651,117
4.2.03.02 WASH BAY CONCRETE												
	BASIN FLOOR & WALLS	GEN U.C. per CY	47.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$20,210	0 \$0	430 \$20,210
Subtotal							\$0	\$0	\$0	\$20,210	\$0	\$20,210
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$5,867	\$0	\$5,867
Subtotal Estimate												\$26,077
Escalation							\$0	\$0	\$0	\$3,484	\$0	\$3,484
Contingency							\$0	\$0	\$0	\$14,593	\$0	\$14,593
--Total 4.2.03.02 WASH BAY CONCRETE					0		\$0	\$0	\$0	\$44,154	\$0	\$44,154
4.2.03.04 MAIN SUPPORT BUILDING CONCRETE												
	FLOOR & FOUNDATION WALLS	GEN U.C. per CY	955.00	CY	0		0 \$0	0 \$0	0 \$0	430 \$410,650	0 \$0	430 \$410,650

DETAIL ITEM REPORT

Project Name: OU-7-10 *Staged Interim Action*
Stage III Project - Retrieval System Project - Option 1
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 Option 1-R*

Client: *S.L. Austad*
 Prepared By: *S. N. Wasley/R. D. Adams*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.03.04 MAIN SUPPORT BUILDING CONCRETE												
	Subtotal						\$0	\$0	\$0	\$410,650	\$0	\$410,650
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	29.03%					\$0	\$0	\$0	\$1 19,212	\$0	\$1 19,212
	Subtotal Estimate											\$529,862
	Escalation						\$0	\$0	\$0	\$70,790	\$0	\$70,790
	Contingency						\$0	\$0	\$0	\$296,520	\$0	\$296,520
--Total	4.2.03.04 MAIN SUPPORT BUILDING CONCRETE				0		\$0	\$0	\$0	\$897,171	\$0	\$897,171

4.2.03.07 CHARACTERIZATION AIRLOCK CONCRETE

	GEN	<i>U.C. per CY</i>					0	0	0	430	0	430
	FLOOR & FOUNDATION WALLS		159.00	CY	0		\$0	\$0	\$0	\$68,370	\$0	\$68,370
	Subtotal						\$0	\$0	\$0	\$68,370	\$0	\$68,370
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	29.03%					\$0	\$0	\$0	\$19,848	\$0	\$1 9,848
	Subtotal Estimate											\$88,218
	Escalation						\$0	\$0	\$0	\$1 1,786	\$0	\$1 1,786
	Contingency						\$0	\$0	\$0	\$49,368	\$0	\$49,368
--Total	4.2.03.07 CHARACTERIZATION AIRLOCK CONCRETE				0		\$0	\$0	\$0	\$1 49,372	\$0	\$149,372

4.2.05.01.01 RETRIEVAL FACILITY STRUCTURE STRUCTURAL STEEL

	STEEL	<i>U.C. per TONS</i>			10.2	542.71	435.676	241.57	1668	0	0	2345.246
	STRUCTURAL STEEL & TRUSS		2,282.00	TONS	23,276	STEEL1	\$994,213	\$551,263	\$3,806,376	\$0	\$0	\$5,351,851

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage 111 Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.05.01.01 RETRIEVAL FACILITY STRUCTURE STRUCTURAL STEEL</u>												
	STEEL	U.C. per TONS			25	\$42.71	1067.833	592.083	6000	0	0	7659.917
	CRANE MAINTENANCE PLATFORM		93.00	TONS	2,325	STEEL1	\$99,309	\$55,064	\$558,000	\$0	\$0	\$712,372
Memo: Assume all stainless steel construction.												
Subtotal							\$1,093,521	\$606,326	\$4,364,376	\$0	\$0	\$6,064,224
Sales Tax							\$0	\$0	\$261,863	\$0	\$0	\$261,863
INEEUSubcontractorOverheads							\$458,546	\$254,251	\$1,939,921	\$0	\$0	\$2,652,718
Subtotal Estimate												\$8,978,804
Escalation							\$207,356	\$114,973	\$877,239	\$0	\$0	\$1,199,568
Contingency							\$868,554	\$481,589	\$3,674,496	\$0	\$0	\$5,024,639
— Total	4.2.05.01.01 RETRIEVAL FACILITY STRUCTURE STRUCTURAL STEEL				25.601		\$2,627,970	\$1,457,139	\$11,117,894	\$0	\$0	\$15,203,012
<u>4.2.05.01.02 RETRIEVAL FACILITY STRUCTURE MISC. METALS</u>												
055207800020	STEEL	U.C. per L.F.			0.125	\$43.62	5.452	0.346	14.4	0	0	20.199
	Railings, industrial welded, 2 rail, 3'-6" high. 1-1/2" pipe		13,654.00	L.F.	1,707	E4	\$74,448	\$4,726	\$196,618	\$0	\$0	\$275,792
055145000020	STEEL	U.C. per V.L.F.			0.64	\$43.62	27.917	1.772	55.5	0	0	85.189
	Ladder, steel, 20" wide, bolted to concrete, with cage		286.00	V.L.F.	183	E4	\$7,984	\$507	\$15,873	\$0	\$0	\$24,364
055303400474	STEEL	U.C. per S.F.			0.093	\$41.67	3.875	2.36	11.2	0	0	17.435
	Floor grtg, plaf, cross bars @ 2" o.c., 1-1/4" x 3/16", over 300 S.F.		27,116.00	S.F.	2,522	E2	\$105,079	\$63,990	\$303,699	\$0	\$0	\$472,769
055177000100	STEEL	U.C. per Riser			1.067	\$43.62	46.543	2.954	137	0	0	186.497
	Stair, stl, sfty nsg, stl stringers, grtg trd, piperlng, 4'-0 wide		72.00	Riser	77	E4	\$3,351	\$213	\$9,864	\$0	\$0	\$13,428
	STEEL	U.C. per EA					0	0	0	15000	0	15000
	EMERGENCY EXIT STAIRWAYS - ALLOWANCE		6.00	EA	0	E4	\$0	\$0	\$0	\$90,000	\$0	\$90,000

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **SL Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.01.02 RETRIEVAL FACILITY STRUCTURE MISC. METALS												
	STEEL	U.C. per LBS			0.013	\$43.62	0.545	0.035	3	0	0	3.58
	HEPA FILTER PLATFORMS		900.00	LBS	11	E4	\$491	\$31	\$2,700	\$0	\$0	\$3,222
Subtotal							\$191,354	\$69,467	\$528,754	\$90,000	\$0	\$879,574
Sales Tax							\$0	\$0	\$31,725	\$0	\$0	\$31,725
INEEUSubcontractorOverheads							\$80,240	\$29,129	\$235,026	\$37,740	\$0	\$382,135
Subtotal Estimate												\$1,293,434
Escalation							\$36,285	\$13,172	\$106,279	\$17,066	\$0	\$172,803
Contingency							\$151,987	\$55,175	\$445,173	\$71,485	\$0	\$723,820
--Total 4.2.05.01.02 RETRIEVAL FACILITY STRUCTURE MISC. METALS					4,500		\$459,866	\$166,944	\$1,346,957	\$216,290	\$0	\$2,190,058
4.2.05.02 WASH BAY METALS												
	STEEL	U.C. per SF			0.26	\$43.50	11.31	6.41	30.75	0	0	48.47
	HD SST GRATING FLOOR		850.00	SF	221	CN-IRON	\$9,614	\$5,449	\$26,138	\$0	\$0	\$41,200
	STEEL	U.C. per TON			20	\$43.50	870	56	6000	0	0	6926
	SST GRATING SUPPORT MEMBERS		4.25	TON	85	CN-IRON	\$3,698	\$238	\$25,500	\$0	\$0	\$29,436
	STEEL	U.C. per SF			2	\$43.62	87.24	5.537	21	0	0	113.777
	BASIN SST LINER		1,335.00	SF	2,670	E4	\$116,465	\$7,393	\$28,035	\$0	\$0	\$151,893
Subtotal							\$129,776	\$13,079	\$79,673	\$0	\$0	\$222,528
Sales Tax							\$0	\$0	\$4,780	\$0	\$0	\$4,780
INEEUSubcontractorOverheads							\$54,419	\$5,484	\$35,414	\$0	\$0	\$95,317
Subtotal Estimate												5322,626
Escalation							\$24,609	\$2,480	\$16,014	\$0	\$0	\$43,103
Contingency							\$103,078	\$10,388	\$67,079	\$0	\$0	\$180,545
--Total 4.2.05.02 WASH BAY METALS					2,976		\$311,882	\$31,432	\$202,959	\$0	\$0	5546,273

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.03 CLEAN TRANSFER AIRLOCK METALS												
	STEEL	U.C. per SF			2	\$43.62	87.24	5.537	21	0	0	113.777
	STAINLESS FLOOR LINER		730.00	SF	1,460	E4	\$63,685	\$4,042	\$15,330	\$0	\$0	\$83,058
Subtotal							\$63,685	\$4,042	\$15,330	\$0	\$0	\$83,058
Sales Tax							\$0	\$0	\$920	\$0	\$0	\$920
INEEUSubcontractorOverheads							\$26,705	\$1,695	\$6,814	\$0	\$0	\$35,214
Subtotal Estimate												\$119,192
Escalation							\$12,076	\$767	\$3,081	\$0	\$0	\$15,924
Contingency							\$50,583	\$3,211	\$12,907	\$0	\$0	\$66,701
—Total 4.2.05.03 CLEAN TRANSFER AIRLOCK METALS					1,460		\$153,050	\$9,715	\$39,052	\$0	\$0	\$201,817
4.2.05.04 MAIN SUPPORT BUILDING METALS												
	STEEL	U.C. per SF			2	\$43.62	87.24	5.538	21	0	0	113.778
	GLOVEBOX STAINLESS FLOOR LINER		1,400.00	SF	2,800	E4	\$122,136	\$7,753	\$29,400	\$0	\$0	\$159,289
	STEEL	U.C. per TON			10.2	\$42.71	435.676	241.57	1668	0	0	2345.246
	PARTION WALL SUPPORT		60.00	TON	612	STEEL1	\$26,141	\$14,494	\$100,080	\$0	\$0	\$140,715
Memo: Allow 3.67lbs/sf of wall area for support steel. Assume necessary due to 24' height of walls.												
	STEEL	U.C. per EA			9	\$42.71	384.42	213.15	770	0	0	1367.57
	STAIRS/LANDINGS OVER RAIL FOUNDATION		6.00	EA	54	STEEL1	\$2,307	\$1,279	\$4,620	\$0	\$0	\$8,205
Subtotal							\$150,583	\$23,526	\$134,100	\$0	\$0	\$308,209
Sales Tax							\$0	\$0	\$8,046	\$0	\$0	\$8,046
INEEUSubcontractorOverheads							\$63,144	\$9,865	\$59,606	\$0	\$0	\$132,615
Subtotal Estimate												\$448,870
Escalation							\$28,554	\$4,461	\$26,954	\$0	\$0	\$59,969
Contingency							\$119,604	\$18,686	\$112,903	\$0	\$0	\$251,193
—Total 4.2.05.04 MAIN SUPPORT BUILDING METALS					3,466		\$361,005	\$56,537	\$341,609	\$0	\$0	\$760,031

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.05HVAC ROOM METALS												
	STEEL	<i>U.C. per SF</i>			<i>2</i>	<i>\$43.62</i>	<i>87.24</i>	<i>5.538</i>	<i>21</i>	<i>0</i>	<i>0</i>	<i>113.778</i>
	STAINLESS FLOOR LINER		6,500.00	SF	13,000	E4	\$567,060	\$35,994	\$136,500	\$0	\$0	\$739,554
	STEEL	<i>U.C. per LBS</i>			<i>0.013</i>	<i>\$43.62</i>	<i>0.545</i>	<i>0.035</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>3.58</i>
	HEPA FILTER PLATFORMS		4,350.00	LBS	54	E4	\$2,372	\$151	\$13,050	\$0	\$0	\$15,572
<hr/>												
	Subtotal						\$569,432	\$36,144	\$149,550	\$0	\$0	\$755,126
	Sales Tax						\$0	\$0	\$8,973	\$0	\$0	\$8,973
	INEEUSubcontractorOverheads	41.93%					\$238,780	\$15,156	\$66,473	\$0	\$0	\$320,410
<hr/>												
	Subtotal Estimate											\$1,084,509
	Escalation						\$107,977	\$6,854	\$30,060	\$0	\$0	\$144,890
	Contingency						\$452,284	\$28,708	\$125,911	\$0	\$0	\$606,903
<hr/>												
--Total	4.2.05.05HVAC ROOM METALS				13,054		\$1,368,473	\$86,863	\$380,967	\$0	\$0	\$1,836,303

4.2.05.06PERSONNEL AIRLOCK METALS

	STEEL	<i>U.C. per SF</i>			<i>2</i>	<i>\$43.62</i>	<i>87.24</i>	<i>5.538</i>	<i>21</i>	<i>0</i>	<i>0</i>	<i>113.778</i>
	STAINLESS FLOOR LINER		850.00	SF	1,700	E4	\$74,154	\$4,707	\$17,850	\$0	\$0	\$96,711
<hr/>												
	Subtotal						\$74,154	\$4,707	\$17,850	\$0	\$0	\$96,711
	Sales Tax						\$0	\$0	\$1,071	\$0	\$0	\$1,071
	INEEUSubcontractorOverheads	41.93%					\$31,095	\$1,974	\$7,934	\$0	\$0	\$41,003
<hr/>												
	Subtotal Estimate											\$138,785
	Escalation						\$14,061	\$893	\$3,588	\$0	\$0	\$10,542
	Contingency						\$58,899	\$3,739	\$15,028	\$0	\$0	\$77,666
<hr/>												
—Total	4.2.05.06PERSONNELAIRLOCK METALS				1,700		\$178,209	\$11,312	\$45,471	\$0	\$0	\$234,992

4.2.05.07CHARACTERIZATIONAIRLOCK METALS

	STEEL	<i>U.C. per SF</i>			<i>2</i>	<i>\$43.62</i>	<i>87.24</i>	<i>5.538</i>	<i>21</i>	<i>0</i>	<i>0</i>	<i>113.778</i>
	STAINLESS FLOOR LINER		4,200.00	SF	8,400	E4	\$366,408	\$23,258	\$88,200	\$0	\$0	\$477,866

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.05.07 CHARACTERIZATIONAIRLOCK METALS												
	Subtotal						\$366,408	\$23,258	\$88,200	\$0	\$0	\$477,866
	Sales Tax						\$0	\$0	\$5,292	\$0	\$0	\$5,292
	INEEUSubcontractorOverheads	41.93%					\$153,646	\$9,753	\$39,204	\$0	\$0	\$202,602
	Subtotal Estimate											\$685,760
	Escalation						\$69,479	\$4,410	\$17,728	\$0	\$0	\$91,618
	Contingency						\$291,028	\$18,473	\$74,258	\$0	\$0	\$383,759
--Total	4.2.05.07 CHARACTERIZATIONAIRLOCK METALS				8,400		\$880,561	\$55,893	\$224,682	\$0	\$0	\$1,161,136

4.2.08.01 RETRIEVAL FACILITY STRUCTURE DOORS& WINDOWS

DOORS	GEN	U.C. per EA	98.00	EA	5.4 529	\$35.81 CN-CARP	193.374 \$18,951	0 \$0	1314 \$128,772	0 \$0	0 \$0	1507.374 \$147,723
	Subtotal						\$18,951	\$0	\$128,772	\$0	\$0	\$147,723
	Sales Tax						\$0	\$0	\$7,726	\$0	\$0	\$7,726
	INEEUSubcontractorOverheads	29.03%					\$5,501	\$0	\$39,625	\$0	\$0	\$45,127
	Subtotal Estimate											\$200,576
	Escalation						\$3,267	\$0	\$23,530	\$0	\$0	\$26,797
	Contingency						\$13,684	\$0	\$98,561	\$0	\$0	\$112,244
—Total	4.2.08.01 RETRIEVAL FACILITY STRUCTURE DOORS& WINDOWS				529		\$41,402	\$0	\$298,215	\$0	\$0	\$339,617

4.2.08.04 MAIN SUPPORT BLDG. DOORS& WINDOWS

SPECIAL SINGLE DOORS	GEN	U.C. per EA	8.00	EA	0		0 \$0	0 \$0	0 \$0	9000 \$72,000	0 \$0	9000 \$72,000
Memo: Special balancingdoors to allow operation with negative pressure on one side.												

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.08.04 MAIN SUPPORT BLDG. DOORS & WINDOWS												
	GEN	U.C. per EA					0	0	0	13000	0	13000
	SPECIAL DOUBLE DOORS		13.00	EA	0		\$0	\$0	\$0	\$169,000	\$0	\$169,000
Memo: Special balancing doors to allow operation with negative pressure on one side.												
Subtotal							\$0	\$0	\$0	\$241,000	\$0	\$241,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$69,962	\$0	\$69,962
Subtotal Estimate												\$310,962
Escalation							\$0	\$0	\$0	\$41,545	\$0	\$41,545
Contingency							\$0	\$0	\$0	\$174,018	\$0	\$174,018
---Total 4.2.08.04 MAIN SUPPORT BLDG. DOORS & WINDOWS					0		\$0	\$0	\$0	\$526,525	\$0	\$526,525

4.2.08.10 SPECIALTY DOORS

Memo: Costs for the specialty airlock doors are based on vendor contact provided by the BBWI engineering group.

15' X 15' AIRLOCK CLEAN TRANSFER DOORS	U.C. per SET	2.00 SET	0	0 \$0	0 \$0	0 \$0	100000 \$200,000	0 \$0	100000 5200,000
15' X 15' WASH BAY DOORS	U.C. per SET	2.00 SET	0	0 \$0	0 \$0	0 \$0	100000 \$200,000	0 \$0	100000 \$200,000
15' X 15' MAINTENTANCE GLOVE BOX DOORS	U.C. per SET	1.00 SET	0	0 \$0	0 \$0	0 \$0	100000 \$100,000	0 \$0	100000 \$100,000
Subtotal				\$0	\$0	\$0	\$500,000	\$0	\$500,000
Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads				0.00%	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate									\$500,000
Escalation				\$0	\$0	\$0	\$66,800	\$0	\$66,800
Contingency				\$0	\$0	\$0	\$279,805	\$0	\$279,805
— Total 4.2.08.10 SPECIALTY DOORS			0	\$0	\$0	\$0	\$846,605	\$0	\$846,605

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiRment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.09.04 MAIN SUPPORT BUILDING FINISHES												
092601005200	GEN	U.C. per S.F.			0.063	\$37.96	2.409	0	0.81	0	0	3.219
	Ptn wl, 5/8", gyp drwl, taped bs, wtr res, met		32,328.00	S.F.	2,051	CARP	\$77,864	\$0	\$26,186	\$0	\$0	5104,050
	std, NLB, 25Ga, 16" oc, 3-5/8" w											
099109200840	PAINT	U.C. per S.F.			0.014	\$33.19	0.448	0	0.09	0	0	0.538
	Walls & clgs, conc, dry wl or plas, oil base, pnt 2		64,656.00	S.F.	873	PORD	\$28,970	\$0	\$5,819	\$0	\$0	\$34,789
	coats, sm fin, roller											
<hr/>												
	Subtotal						\$106,834	\$0	\$32,005	\$0	\$0	5138,839
	Sales Tax						\$0	\$0	\$1,920	\$0	\$0	\$1,920
	INEEL/Subcontractor Overheads	32.25%					\$34,752	\$0	\$10,644	\$0	\$0	\$45,396
<hr/>												
	Subtotal Estimate											\$186,155
	Escalation						\$18,916	\$0	\$5,954	\$0	\$0	\$24,870
	Contingency						\$79,230	\$0	\$24,941	\$0	\$0	\$104,171
<hr/>												
--Total	4.2.09.04 MAIN SUPPORT BUILDING FINISHES				2,924		\$239,732	\$0	\$75,464	\$0	\$0	\$315,197

4.2.09.10 STRIPPABLE COATINGS

Memo: *Applied to all interior liner panel surfaces.*

	U.C. per SSF				0	0	0	3.5	0	3.5
STRIPPABLE COATINGS- RETRIEVAL FACILITY STRUCTURE		134,316.00	SSF	0	\$0	\$0	\$0	\$470,106	\$0	\$470,106
	U.C. per SSF				0	0	0	3.5	0	3.5
STRIPPABLE COATINGS- CLEAN AIR LOCK TRANSFER STRUCTURE		3,611.00	SSF	0	\$0	\$0	\$0	\$12,639	\$0	\$12,639
	U.C. per SSF				0	0	0	3.5	0	3.5
STRIPPABLE COATINGS- HVAC ROOM STRUCTURE (@ 50% OF HVAC ROOM)		22,509.00	SSF	0	\$0	\$0	\$0	\$78,782	\$0	\$78,782
	U.C. per SSF				0	0	0	3.5	0	3.5
STRIPPABLE COATINGS- PERSONNEL AIRLOCK STRUCTURE		4,066.00	SSF	0	\$0	\$0	\$0	\$14,231	\$0	\$14,231
	U.C. per SSF				0	0	0	3.5	0	3.5
STRIPPABLE COATINGS- MAINTENANCE BAY GLOVE BOX STRUCTURE		5,215.00	SSF	0	\$0	\$0	\$0	\$18,253	\$0	\$18,253

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
4.2.09.10 STRIPPABLE COATINGS												
Memo:	Applied to all interior liner panel surfaces.											
		U.C. per SSF					0	0	0	3.5	0	3.5
	STRIPPABLE COATINGS-AIRLOCK TO CHARACTERIZATION STRUCTURE	SSF	15,240.00		0		\$0	\$0	\$0	\$53,340	\$0	\$53,340
<hr/>												
	Subtotal						\$0	\$0	\$0	\$647,350	\$0	\$647,350
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$647,350
	Escalation						\$0	\$0	\$0	\$86,486	\$0	\$86,486
	Contingency						\$0	\$0	\$0	\$362,252	\$0	\$362,252
<hr/>												
— Total	4.2.09.10 STRIPPABLE COATINGS				0		\$0	\$0	\$0	\$1,096,087	\$0	\$1,096,087

4.2.10.01 RETRIEVAL FACILITY STRUCTURE SPECIALTIES

GEN	U.C. per SF	0.135	\$35.81	4.834	0	46.32	0	0	51.154
CRANE MAINTENANCE CURTAIN	1,800.00 SF	243	CN-CARP	\$8,702	\$0	\$83,376	\$0	\$0	\$92,078
Subtotal				\$8,702	\$0	\$83,376	\$0	\$0	\$92,078
Sales Tax				\$0	\$0	\$5,003	\$0	\$0	\$5,003
INEEL/Subcontractor Overheads	29.03%			\$2,526	\$0	\$25,656	\$0	\$0	\$28,182
Subtotal Estimate									\$125,263
Escalation				\$1,500	\$0	\$15,235	\$0	\$0	\$16,735
Contingency				\$6,284	\$0	\$63,819	\$0	\$0	\$70,103
--Total	4.2.10.01 RETRIEVAL FACILITY STRUCTURE SPECIALTIES	243		\$19,012	\$0	\$193,089	\$0	\$0	\$212,101

4.2.11.01 WASH BAY EQUIPMENT

111791501410	PIPE	U.C. per Ea,	20	\$39.33	786.6	0	0	0	0	786.6
	Waste handling for hazardous waste, 55 gal drum	1.00 Ea	20	CN-PIPE	\$787	\$0	\$0	\$0	\$0	\$707

Memo: For load out of Wash Bay filter solids.

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.1.1.01 WASH BAY EQUIPMENT</u>												
	PIPE	<i>U.C. per EA</i>			20	\$39.33	786.6	0	0	0	0	786.6
	WASH BAY FILTER FEED PUMP		2.00	EA	40	CN-PIPE	\$1,573	\$0	\$0	\$0	\$0	\$1,573
Memo: Taken from estimate #2646 SBW Treatment - NGLW CslX Study. Actual equipment requirements are undefined at this point in the design development. Used the information from estimate #2646 as an allowance.												
	PIPE	<i>U.C. per EA</i>			80	\$39.33	3146.4	0	0	0	0	3146.4
	WASH BAY FILTER		2.00	EA	160	CN-PIPE	\$6,293	\$0	\$0	\$0	\$0	\$6,293
Memo: Taken from estimate #2646 SBW Treatment - NGLW CslX Study. Actual equipment requirements are undefined at this point in the design development. Used the information from estimate #2646 as an allowance.												
Subtotal							\$8,653	\$0	\$0	\$0	\$0	\$8,653
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEU Subcontractor Overheads							\$4,162	\$0	\$0	\$0	\$0	\$4,162
Subtotal Estimate												\$12,815
Escalation							\$1,712	\$0	\$0	\$0	\$0	\$1,712
Contingency							\$7,172	\$0	\$0	\$0	\$0	\$7,172
--Total 4.2.11.01 WASH BAY EQUIPMENT					220		\$21,699	\$0	\$0	\$0	\$0	\$21,699
<u>4.2.13.01 FACILITY MOCK-UP</u>												
	MOCK-UP COSTS FOR STAGE III RETRIEVAL	<i>U.C. per LS</i>	1.00	LS	0		0	0	0	2606000	0	2606000
Memo: Mock-up costs are based on the Stage III teams input. It was decided by the team lead to use the GEM projects mock-up costs times two. Based on the current cost to date data sheet provided by the GEM PCE, this information is available in estimating back-up file. The cost for the GEM project mock-up was \$1,303,388 (rounded to \$1,303,000).							\$0	\$0	\$0	\$2,606,000	\$0	\$2,606,000
Subtotal							\$0	\$0	\$0	\$2,606,000	\$0	\$2,606,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$2,606,000
Escalation							\$0	\$0	\$0	\$348,162	\$0	\$348,162
Contingency							\$0	\$0	\$0	\$1,273,423	\$0	\$1,273,423
--Total 4.2.13.01 FACILITY MOCK-UP					0		\$0	\$0	\$0	\$4,227,584	\$0	\$4,227,584

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-17**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.13.02.01 ERECT FABRIC STRUCTURES												
<i>Memo: Unit costs are based on the GEM project square footages, this unit costs also include equipment for structure erection, anchoring, door installation and labor.</i>												
	ERECT RFS FABRIC COVERING ONLY	U.C. per SF	135,000.00	SF	0		\$0	\$0	\$1,485,000	\$850,500	\$0	\$2,335,500
<i>Memo: Assume a 50/50 split between frame and fabric erection.</i>												
	ERECT MAIN SUPPORT BUILDING- FRAME, FABRIC, & DOORS	U.C. per SF	31,200.00	SF	0		\$0	\$0	\$826,800	\$393,120	\$0	\$1,219,920
	ERECT AIRLOCK CHARACTERIZATION STRUCTURE- FRAME, FABRIC	U.C. per SF	4,200.00	SF	0		\$0	\$0	\$126,000	\$52,920	\$0	\$178,920
Subtotal							\$0	\$0	\$2,437,800	\$1,296,540	\$0	\$3,734,340
Sales Tax							\$0	\$0	\$146,268	\$0	\$0	\$146,268
INEEU Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$3,880,608
Escalation							\$0	\$0	\$345,231	\$173,218	\$0	\$518,449
Contingency							\$0	\$0	\$1,262,706	\$633,555	\$0	\$1,896,260
—Total 4.2.13.02.01 ERECT FABRIC STRUCTURES					0		\$0	\$0	\$4,192,005	\$2,103,312	\$0	\$6,295,317

4.2.13.02.02 ERECT LINER PANELS

Memo: Costs are based on a surface per square foot from the GEM facility. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containment area. This is the same concept as the GEM project, with the exception that the panels will be supported by the WES structure. This cost per surface SF includes windows for viewing and lighting. This unit cost also includes sealing and pressure testing of the structure.

RFS	U.C. per SSF	134,316.00	SSF	0		\$0	\$0	\$0	\$5,218,177	\$0	\$0	\$5,218,177
WASH BAY STRUCTURE	U.C. per SSF	4,066.00	SSF	0		\$0	\$0	\$0	\$157,964	\$0	\$0	\$157,964
CLEAN AIRLOCK TRANSFER STRUCTURE	U.C. per SSF	3,611.00	SSF	0		\$0	\$0	\$0	\$140,287	\$0	\$0	\$140,287

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S. L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.13.02.02 ERECT LINER PANELS												
<i>Memo: Costs are based on a surface per square foot from the GEM facility. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containment area. This is the same concept as the GEM project, with the exception that the panels will be supported by the WES structure. This cost per surface \$F includes windows for viewing and lighting. This unit cost also includes sealing and pressure testing of the structure.</i>												
	HVAC ROOM STRUCTURE (@ 50% OF HVAC ROOM)	U.C. per SSF	22,509.00	SSF	0		\$0	\$0	\$0	38.85	0	38.85
							\$0	\$0	\$0	\$874,475	\$0	9874,475
	PERSONNEL AIRLOCK STRUCTURE	U.C. per SSF	4,066.00	SSF	0		\$0	\$0	\$0	38.85	0	38.85
							\$0	\$0	\$0	\$157,964	\$0	\$157,964
	MAINTENANCE BAY GLOVE BOX STRUCTURE	U.C. per SSF	5,215.00	SSF	0		\$0	\$0	\$0	38.85	0	38.85
							\$0	\$0	\$0	\$202,603	\$0	\$202,603
	AIRLOCK TO CHARACTERIZATION STRUCTURE	U.C. per SSF	15,240.00	SSF	0		\$0	\$0	\$0	38.85	0	38.85
							\$0	\$0	\$0	\$592,074	\$0	\$592,074
Subtotal							\$0	\$0	\$0	\$7,343,544	\$0	\$7,343,544
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$7,343,544
Escalation							\$0	\$0	\$0	\$981,097	\$0	\$981,097
Continaency							\$0	\$0	\$0	\$3,588,425	\$0	\$3,588,425
--Total 4.2.13.02.02 ERECT LINER PANELS					0		\$0	\$0	\$0	\$11,913,066	\$0	\$11,913,066

4.2.14.01 RETRIEVAL FACILITY STRUCTURE CONVEYING SYSTEMS

OHC-1.2	STEEL	U.C. per EA			450	\$42.71	19221	10657.5	0	0	0	29878.5
	OVERHEAD CRANE		2.00	EA	900	STEEL1	\$38,442	\$21,315	\$0	\$0	\$0	\$59,757
<i>Memo See attached equipment list for specifications and estimate basis.</i>												

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage 111 Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.14.01 RETRIEVAL FACILITY STRUCTURE CONVEYING SYSTEMS												
	Subtotal						\$38,442	\$21,315	\$0	\$0	\$0	\$59,757
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	41.93%					\$16,120	\$8,938	\$0	\$0	\$0	\$25,058
	Subtotal Estimate											\$84,815
	Escalation						\$7,289	\$4,042	\$0	\$0	\$0	\$11,331
	Contingency						\$30,534	\$16,930	\$0	\$0	\$0	\$47,465
---Total	4.2.14.01 RETRIEVAL FACILITY STRUCTURE CONVEYING SYSTEMS				900		\$92,386	\$51,225	\$0	\$0	\$0	\$143,611

4.2.14.04 MAIN SUPPORT BLDG. CONVEYING SYSTEMS

	STEEL	<i>U.C. per LS</i>			120	\$42.71	5125.6	2842	0	0	0	7967.6
	MAINT. BAY GLOVEBOX CRANE INSTALLATION		1.00	LS	120	STEEL1	\$5,126	\$2,842	\$0	\$0	\$0	\$7,968
Memo: Based on Richard's. Added 50% to manhours for block #5 of the Nine Block Matrix.												
	Subtotal						\$5,126	\$2,842	\$0	\$0	\$0	\$7,968
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	41.93%					\$2,149	\$1,192	\$0	\$0	\$0	\$3,341
	Subtotal Estimate											\$11,309
	Escalation						\$972	\$539	\$0	\$0	\$0	\$1,511
	Contingency						\$4,071	\$2,257	\$0	\$0	\$0	\$6,329
---Total	4.2.14.04 MAIN SUPPORT BLDG. CONVEYING SYSTEMS				120		\$12,318	\$6,830	\$0	\$0	\$0	\$19,148

4.2.15.01.01 HVAC - DUCTWORK

	HVAC	<i>U.C. per LBS</i>			0.2	\$36.82	7.364	0.3	2	0	0	9.664
	STAINLESS STEEL DUCTWORK		338,230.00	LBS	67,646	CN-SHEE	\$2,490,726	\$101,469	\$676,460	\$0	\$0	\$3,268,655

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.01.01 HVAC - DUCTWORK												
	HVAC											
	GALVANIZED STEEL DUCTWORK		U.C. per LBS		0.08	\$36.82	2.946	0.3	0.75	0	0	3.996
			129,380.00 LBS		10,350	CN-SHEE	\$381,102	\$38,814	\$97,035	\$0	\$0	\$516,951
Subtotal							\$2,871,827	\$140,283	\$773,495	\$0	\$0	\$3,785,605
Sales Tax							\$0	\$0	\$46,410	\$0	\$0	\$46,410
INEEL Subcontractor Overheads							\$1,310,576	\$64,019	\$374,168	\$0	\$0	\$1,748,763
Subtotal Estimate												\$5,580,778
Escalation							\$558,769	\$27,295	\$159,528	\$0	\$0	\$745,592
Contingency							\$2,340,393	\$114,324	\$668,181	\$0	\$0	\$3,122,898
<hr/>												
— Total	4.2.15.01.01 HVAC - DUCTWORK				77,996		\$7,081,566	\$345,920	\$2,021,782	\$0	\$0	\$9,449,268
<hr/>												
4.2.15.01.02 EXHAUST STACK												
	EXHAUST STACK 40" X 65 FT HIGH (C.S.) INCLUDING		U.C. per LBS				0	0	0	3.94	0	3.94
	BASE		41,393.00 LBS		0		\$0	\$0	\$0	\$163,088	\$0	\$163,088
Memo: Costs are based on the exhaust stack built and installed for the GEM project, but sized accordingly to support this Stage III project. Assume the stack base to be 105" in dia. and a 40" dia for the main stack section x 65 ft high, all fabricated from carbon steel materials. Estimated weight including base to be around 41,393lbs.												
	INSTALLATION OF EXHAUST STACK		U.C. per LBS				0	0	0	2.3	0	2.3
			41,393.00 LBS		0		\$0	\$0	\$0	\$95,204	\$0	\$95,204
Memo: Stack installation costs are based on the GEM project, and increased accordingly to the new stack ROM design dimensions. Estimated weight, including base 41,393lbs												
Subtotal							\$0	\$0	\$0	\$258,292	\$0	\$258,292
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$258,292
Escalation							\$0	\$0	\$0	\$34,508	\$0	\$34,508
Contingency							\$0	\$0	\$0	\$144,535	\$0	\$144,535
<hr/>												
— Total	4.2.15.01.02 EXHAUST STACK				0		\$0	\$0	\$0	\$437,336	\$0	\$437,336

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.01.03 EMISSIONS/VOC MONITORING												
<i>Memo: Based on the GEM project design and cost. Assume the GEM project system will be sufficient, not cost adjustment needed for larger stack.</i>												
	EXHAUST STACK MONITORING EQUIPMENT	<i>U.C. per EA</i>	1.00	EA	0		0	0	160000	0	0	160000
							\$0	\$0	\$160,000	\$0	\$0	\$160,000
	INSTALLATION OF MONITORING EQUIPMENT	<i>U.C. per LS</i>	1.00	LS	0		0	0	0	9000	0	9000
							\$0	\$0	\$0	\$9,000	\$0	\$9,000
	VOC MONITORING EQUIPMENT	<i>U.C. per LS</i>	1.00	LS	0		0	0	0	100000	0	100000
							\$0	\$0	\$0	\$100,000	\$0	\$100,000
<i>Memo: Cost are based on an allowance provided by Ryan McMurtrey, Ryan has experience in this type of system on other projects of this nature.</i>												
Subtotal							\$0	\$0	\$160,000	\$109,000	\$0	\$269,000
Sales Tax							\$0	\$0	\$9,600	\$0	\$0	\$9,600
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$278,600
Escalation							\$0	\$0	\$22,659	\$14,562	\$0	\$37,221
Contingency							\$0	\$0	\$94,905	\$60,994	\$0	\$155,899
—Total 4.2.15.01.03 EMISSIONS NOC MONITORING					0		\$0	\$0	\$207,164	\$184,557	\$0	\$471,720

4.2.15.01.04 HVAC - EQUIPMENT

Memo: Costs for the equipment are included in the procurement WBS. These details only include installation labor.

	PIPE	<i>U.C. per EA</i>			100	\$36.82	3682	1500	0	0	0	5182
	INSTALL-MIST ELIMINATOR		1.00	EA	100	CN-SHEE	\$3,682	\$1,500	\$0	\$0	\$0	\$5,182
	PIPE	<i>U.C. per EA</i>			130	\$36.82	4786.6	1500	0	0	0	6286.6
	INSTALL-DUST COLLECTOR (55,000 CFM)		3.00	EA	390	CN-SHEE	\$14,360	\$4,500	\$0	\$0	\$0	\$18,860
	PIPE	<i>U.C. per EA</i>			150	\$36.82	5523	1000	0	0	0	6523
	INSTALL-BLOWER 300 HP (110,000 CFM)		2.00	EA	300	CN-SHEE	\$11,046	\$2,000	\$0	\$0	\$0	\$13,046
	PIPE	<i>U.C. per EA</i>			100	\$36.82	3682	1000	0	0	0	4682
	INSTALL-BLOWER 150 HP (37,000 CFM)		2.00	EA	200	CN-SHEE	\$7,364	\$2,000	\$0	\$0	\$0	\$9,364

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.01.04	HVAC - EQUIPMENT											
Memo: Costs for the equipment are included in the procurement WBS. These details only include installation labor.												
	PIPE	U.C. per EA			77	\$36.82	2835.14	0	0	0	0	2835.14
	INSTALL-VFD 150 HP FOR FAN MOTORS		2.00	EA	154	CN-SHEE	\$5,670	\$0	\$0	\$0	\$0	\$5,670
	PIPE	U.C. per EA			85	\$36.82	3129.7	0	0	0	0	3129.7
	INSTALL-VFD 300 HP FOR FAN MOTORS		2.00	EA	170	CN-SHEE	\$6,259	\$0	\$0	\$0	\$0	\$6,259
	PIPE	U.C. per EA			6	\$36.82	220.92	0	0	0	0	220.92
	INSTALL-FIT TRANSMITTERS		4.00	EA	24	CN-SHEE	\$884	\$0	\$0	\$0	\$0	\$884
	PIPE	U.C. per EA			80	\$36.82	2945.6	1000	0	0	0	3945.6
	INSTALL-RFS PENTHOUSE (37,000 CFM)		1.00	EA	80	CN-SHEE	\$2,946	\$1,000	\$0	\$0	\$0	\$3,946
	PIPE	U.C. per EA			120	\$36.82	4418.4	1500	0	0	0	5918.4
	INSTALL-HEPA HOUSINGS 3H X 5W		2.00	EA	240	CN-SHEE	\$8,837	\$3,000	\$0	\$0	\$0	\$11,837
	PIPE	U.C. per EA			160	\$36.82	5891.2	1500	0	0	0	7391.2
	INSTALL-HEPA HOUSINGS 4H X 6W		2.00	EA	320	CN-SHEE	\$11,782	\$3,000	\$0	\$0	\$0	\$14,782
	PIPE	U.C. per EA			140	\$36.82	5154.8	1500	0	0	0	6654.8
	INSTALL-HEPA HOUSINGS 3H X 6W		1.00	EA	140	CN-SHEE	\$5,155	\$1,500	\$0	\$0	\$0	\$6,655
	PIPE	U.C. per EA			12	\$36.82	441.84	25	0	0	0	466.84
	INSTALL-HEPA HOUSINGS DON/DOFT AREAS		4.00	EA	48	CN-SHEE	\$1,767	\$100	\$0	\$0	\$0	\$1,867
	PIPE	U.C. per EA			6	\$36.82	220.92	0	0	0	0	220.92
	INSTALL-PLC CONTROL UNITS		2.00	EA	12	CN-SHEE	\$442	\$0	\$0	\$0	\$0	\$442
	PIPE	U.C. per EA			120	\$36.82	4418.4	500	0	0	0	4918.4
	INSTALL-AIR COMPRESSOR (25HP)		1.00	EA	120	CN-SHEE	\$4,418	\$500	\$0	\$0	\$0	\$4,918
	PIPE	U.C. per EA			30	\$36.82	1104.6	100	0	0	0	1204.6
	INSTALL-DESSICANT DRYER FILTER		1.00	EA	30	CN-SHEE	\$1,105	\$100	\$0	\$0	\$0	\$1,205

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.15.01.04 HVAC - EQUIPMENT</u>												
Memo: Costs for the equipment are included in the procurement WBS. These details only include installation labor.												
	PIPE	<i>U.C. per EA</i>			40	\$36.82	1472.8	50	0	0	0	1522.8
	INSTALL-72" DIA. DAMPERS (LEAK PROOF)		10.00	EA	400	CN-SHEE	\$14,728	\$500	\$0	\$0	\$0	\$15,228
<hr/>												
	Subtotal						\$100,445	\$19,700	\$0	\$0	\$0	\$120,145
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	48.10%					\$48,318	\$9,476	\$0	\$0	\$0	\$57,795
<hr/>												
	Subtotal Estimate											\$177,939
	Escalation						\$19,875	\$3,898	\$0	\$0	\$0	\$23,773
	Contingency						\$83,245	\$16,327	\$0	\$0	\$0	\$99,572
<hr/>												
--Total 4.2.15.01.04 HVAC - EQUIPMENT					2,720		\$251,003	\$49,401	\$0	\$0	\$0	\$301,284

4.2.15.01.05 CHILLER PIPING & EQUIPMENT

Memo: Costs for the equipment are included in the procurement WBS. These details only include installation labor with the exception of piping materials and insulation.

	PIPE	<i>U.C. per EA</i>			100	\$39.33	3933	0	0	0	0	3933
	INSTALL-150 TON PACKAGED CHILLER		1.00	EA	100	CN-PIPE	\$3,933	\$0	\$0	\$0	\$0	\$3,933
<hr/>												
	PIPE	<i>U.C. per EA</i>			20	\$39.33	786.6	0	0	0	0	786.6
	INSTALL-250 GALLON WATER TANK		1.00	EA	20	CN-PIPE	\$787	\$0	\$0	\$0	\$0	\$787
<hr/>												
	PIPE	<i>U.C. per EA</i>			120	\$39.33	4719.6	0	0	0	0	4719.6
	INSTALL-BOILERWATERHEATER 3,000 MBH		1.00	EA	120	CN-PIPE	\$4,720	\$0	\$0	\$0	\$0	\$4,720
<hr/>												
	PIPE	<i>U.C. per EA</i>			32	\$39.33	1258.56	0	0	0	0	1258.56
	INSTALL-5 HP PUMP		3.00	EA	96	CN-PIPE	\$3,776	\$0	\$0	\$0	\$0	\$3,776
<hr/>												
	PIPE	<i>U.C. per EA</i>			43	\$39.33	1691.19	0	0	0	0	1691.19
	INSTALL-25 HP PUMP		1.00	EA	43	CN-PIPE	\$1,691	\$0	\$0	\$0	\$0	\$1,691
<hr/>												
	PIPE	<i>U.C. per EA</i>			19.3	\$39.33	759.07	0	0	0	0	759.07
	INSTALL-VFD FOR 5 HP PUMP		1.00	EA	19	CN-PIPE	\$759	\$0	\$0	\$0	\$0	\$759
<hr/>												
	PIPE	<i>U.C. per EA</i>			6	\$39.33	235.98	0	0	0	0	235.98
	INSTALL-PLC CONTROLS UNITS		1.00	EA	6	CN-PIPE	\$236	\$0	\$0	\$0	\$0	\$236

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.15.01.05 CHILLER PIPING & EQUIPMENT</u>												
<i>Memo: Costs for the equipment are included in the procurement WBS. These details only include installation labor with the exception of piping materials and insulation.</i>												
	PIPE	<i>U.C. per EA</i>			12	\$39.33	471.96	0	0	0	0	471.96
	INSTALL-3-WAY CONTROL VALVES		5.00	EA	60	CN-PIPE	\$2,360	\$0	\$0	\$0	\$0	\$2,360
	PIPE	<i>U.C. per EA</i>			8	\$39.33	314.64	0	0	0	0	314.64
	INSTALL-MANUALCONTROLS VALVES		28.00	EA	224	CN-PIPE	\$8,810	\$0	\$0	\$0	\$0	\$8,810
	PIPE	<i>U.C. per LF</i>			1.2	\$39.33	47.196	0	16	0	0	63.196
5	CHILLER PIPING (INCLUDES HANGERS & FITTINGS)		2,000.00	LF	2,400	CN-PIPE	\$94,392	\$0	\$32,000	\$0	\$0	\$126,392
	PIPE	<i>U.C. per LF</i>			0.8	\$39.33	31.464	0	8	0	0	39.464
2	CONDENSATE DRAIN PIPING		500.00	LF	400	CN-PIPE	\$15,732	\$0	\$4,000	\$0	\$0	\$19,732
	PIPE	<i>U.C. per LF</i>			0.7	\$39.33	27.531	0	17	0	0	44.531
5	PIPING INSULATION		2,000.00	LF	1,400	CN-PIPE	\$55,062	\$0	\$34,000	\$0	\$0	\$89,062
	PIPE	<i>U.C. per EA</i>			40	\$39.33	1573.2	0	0	0	0	1573.2
	INSTALL-HEATING COIL 300 MBH		2.00	EA	EO	CN-PIPE	\$3,146	\$0	\$0	\$0	\$0	\$3,146
	PIPE	<i>U.C. per EA</i>			60	\$39.33	2359.8	0	0	0	0	2359.8
	INSTALL-HEATING COIL 420 MBH		1.00	EA	60	CN-PIPE	\$2,360	\$0	\$0	\$0	\$0	\$2,360
	PIPE	<i>U.C. per EA</i>			80	\$39.33	3146.4	0	0	0	0	3146.4
	INSTALL-HEATING COIL 1000 MBH		2.00	EA	160	CN-PIPE	\$6,293	\$0	\$0	\$0	\$0	\$6,293
Subtotal							\$204,056	\$0	\$70,000	\$0	\$0	\$274,056
Sales Tax							\$0	\$0	\$4,200	\$0	\$0	\$4,200
INEEL/Subcontractor Overheads							\$98,159	\$0	\$35,693	\$0	\$0	\$133,852
Subtotal Estimate												\$412,108
Escalation							\$40,376	\$0	\$14,682	\$0	\$0	\$55,058
Contingency							\$169,114	\$0	\$61,494	\$0	\$0	\$230,608
--Total 4.2.15.01.05 CHILLER PIPING & EQUIPMENT					5,188		\$511,704	\$0	\$186,069	\$0	\$0	\$697,773

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **SL Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.02.01 RETRIEVAL PROJECT SYSTEM (RPS) FIRE SYSTEM CONTROLS												
<i>Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility.</i>												
		U.C. per SF										
	RPS FIRE SYSTEM CONTROLS (FACILITY FOOT PRINT)		170,200.00	SF	0		\$0	\$0	\$0	3.4 \$578,680	0 \$0	3.4 \$578,680
	Subtotal						\$0	\$0	\$0	5578,680	\$0	\$578,680
	Sales Tax						\$0	\$0	\$0	\$0	50	50
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	50	\$0
	Subtotal Estimate											\$578,680
	Escalation						\$0	\$0	\$0	\$77,312	\$0	\$77,312
	Contingency						\$0	\$0	\$0	\$323,818	\$0	\$323,818
--Total	4.2.15.02.01 RETRIEVAL PROJECT SYSTEM (RPS) FIRE SYSTEM CONTROLS				0		\$0	\$0	\$0	\$979,810	\$0	5979,810

4.2.15.02.02 RFS DRY PIPE FIRE PROTECTION

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.

		U.C. per SF										
	DRY PIPE FIRE PROTECTION		231,300.00	SF	0		\$0	\$0	50	3.65 \$844,245	0 \$0	3.65 \$844,245
<i>Memo: Two dry pipe systems are required. One system will cover the area between the fabric outer structure and the liner, the other system will cover the area within the liner.</i>												
		U.C. per LS										
	FEED MAINS		2.00	LS	0		\$0	\$0	\$0	8000 \$16,000	0 \$0	8000 \$16,000
	Subtotal						\$0	\$0	\$0	\$860,245	50	\$860,245
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	50	\$0
	Subtotal Estimate											\$860,245
	Escalation						\$0	\$0	\$0	\$1,456,551	\$0	\$1,456,551
	Contingency						\$0	\$0	\$0	\$481,377	\$0	\$481,377
--Total	4.2.15.02.02 RFS DRY PIPE FIRE PROTECTION				0		\$0	\$0	\$0	\$1,456,551	\$0	\$1,456,551

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.15.02.04 RFS EXTRA HAZARD FOAM SYSTEM</u>												
<i>Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.</i>												
	EXTRA HAZARD FOAM SYSTEM (EQUIPMENT ONLY)	U.C. per LS	1.00	LS	0		0	0	0	100000	0	100000
							\$0	\$0	\$0	\$100,000	\$0	\$100,000
	EXTRA HAZARD FOAM PIPING DISTRIBUTION SYSTEM	U.C. per SF	96,300.00	SF	0		0	0	0	4.35	0	4.35
							\$0	\$0	\$0	\$418,905	\$0	\$418,905
	EXTRA HAZARD FOAM MONITOR NOZZLES	U.C. per EA	10.00	EA	0		0	0	0	10000	0	10000
							\$0	\$0	\$0	\$100,000	\$0	\$100,000
Subtotal							\$0	\$0	\$0	\$618,905	\$0	\$618,905
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$618,905
Escalation							\$0	\$0	\$0	\$82,686	\$0	\$82,686
Contingency							\$0	\$0	\$0	\$346,327	\$0	\$346,327
---Total 4.2.15.02.04 RFS EXTRA HAZARD FOAM SYSTEM					0		\$0	\$0	\$0	\$1,047,918	\$0	\$1,047,918

4.2.15.02.05 MAIN SUPPORT BUILDING DRY PIPE SYSTEM

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.

	MAIN SUPPORT BUILDING STRUCTURE-DRY PIPE FIRE PROTECTION	U.C. per	31,200.00		0		0	0	0	3.65	0	3.65
							\$0	\$0	\$0	\$113,880	\$0	\$113,880

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.02.05 MAIN SUPPORT BUILDING DRY PIPE SYSTEM												
<i>Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.</i>												
	MAIN SUPPORT BUILDING- FEED MAINS	U.C. per LS	1.00	LS	0		\$0	\$0	\$0	3000 \$3,000	0 \$0	3000 \$3,000
Subtotal							\$0	\$0	\$0	\$16,880	\$0	\$16,880
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
										0.00%		
Subtotal Estimate												\$116,880
Escalation							\$0	\$0	\$0	\$15,615	\$0	\$15,615
Contingency							\$0	\$0	\$0	\$65,404	\$0	\$65,404
--Total					4.2.15.02.05 MAIN SUPPORT BUILDING DRY PIPE SYSTEM	0	\$0	\$0	\$0	\$197,899	\$0	\$197,899

4.2.15.02.06 ADDITIONAL MAIN SUPPORT BUILDING FIRE PROTECTION SYSTEMS

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.

	MAINTENANCE BAY GLOVE BOX AREA-DRY PIPE FIRE PROTECTION	U.C. per SF	1,400.00	SF	0		\$0	\$0	\$0	4.35 \$6,090	0 \$0	4.35 \$6,090
	HVAC ROOM	U.C. Der SF	6,500.00	SF	0		\$0	\$0	\$0	4.35 \$28,275	0 \$0	4.35 \$28,275
<i>Memo: HVAC CONFINEMENT AREA, 50% OF HVAC AREA, REQUIRES INDEPENDENT FIRE PROTECTION.</i>												
	WASH BAY FIRE PROTECTION	U.C. per SF	850.00	SF	0		\$0	\$0	\$0	4.35 \$3,698	0 \$0	4.35 \$3,698
	PERSONNEL AIRLOCK AREA FIRE PROTECTION	U.C. per SF	850.00	SF	0		\$0	\$0	\$0	4.35 \$3,698	0 \$0	4.35 \$3,698

DETAIL ITEM REPORT

Project Name: ***OU-7-10 Staged Interim Action
Stage III Project - Retrieval System Project- Option 1***
Project Location: ***INEEL-RWMC***
Estimate Number: ***5974-2 Option 7-R***

Client: **S.L. Aostad**
Prepared By: **S. N. Wasley/R. D. Adams**
Estimate Type: **Project Support**

Code	Description	Contractor	Qty	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	Other	TOTAL
4.2.15.02.06 ADDITIONAL MAIN SUPPORT BUILDING FIRE PROTECTION SYSTEMS												
Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.												
	CLEAN AIRLOCK AREA FIRE PROTECTION	U.C per SF	730.00	SF	0		\$0	\$0	\$0	\$3,176	\$0	\$3,176
Subtotal							\$0	\$0	\$0	\$44,936	\$0	\$44,936
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$44,936
Escalation							\$0	\$0	\$0	\$6,003	\$0	\$6,003
Contingency							\$0	\$0	\$0	\$25,145	\$0	\$25,145
— Total 4.2.15.02.06 ADDITIONAL MAIN SUPPORT BUILDING FIRE PROTECTION SYSTEMS					0		\$0	\$0	\$0	\$76,084	\$0	\$76,084

4.2.15.02.07 AIRLOCK TO CHARACTERIZATION FIRE PROTECTION

Memo: Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire protection systems at the INEEL, as well as the GEM project.

AIRLOCK TO CHARACTERIZATION-DRY PIPE FIRE PROTECTION		8,400.00 SF	0	\$0	\$0	\$0	\$30,660	\$0	\$30,660
Memo: Two dry pipe systems are required. One system will cover the area between the fabric outer structure and the liner, the other system will cover the area within the liner.									
Subtotal				\$0	\$0	\$0	\$30,660	\$0	\$30,660
Sales Tax				\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads				\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate									\$30,660
Escalation				\$0	\$0	\$0	\$4,096	\$0	\$4,096
Contingency				\$0	\$0	\$0	\$17,157	\$0	\$17,157
--Total 4.2.15.02.07 AIRLOCK TO CHARACTERIZATIONFIRE PROTECTION			0	\$0	\$0	\$0	\$51,913	\$0	\$51,913

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **SL Aostad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.15.03 PLANT AIR</u>												
Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. Equipment cost for the compressor is located in the procurement WBS.												
	RFS PLANT AIR DISTRIBUTIONSYSTEM	U.C. per SF	135,000.00	SF	0		0	0	0	2.04	0	2.04
							\$0	\$0	\$0	\$275,400	\$0	\$275,400
	MAIN SUPPORT BUILDING (ALL AREAS)	U.C. per SF	31,200.00	SF	0		0	0	0	2.04	0	2.04
							\$0	\$0	\$0	\$63,648	\$0	\$63,648
Subtotal							\$0	\$0	\$0	\$339,048	\$0	\$339,048
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEELSubcontractorOverheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$339,048
Escalation							\$0	\$0	\$0	\$45,297	\$0	\$45,297
Contingency							\$0	\$0	\$0	\$1 89,725	\$0	\$1 89,725
—Total 4.2.15.03 PLANT AIR					0		\$0	\$0	\$0	\$574,070	\$0	\$574,070

4.2.15.04 BREATHING AIR

Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. No costs for the breathing air compressor have been included, assume provided to the project by the BBWI equipmentpool at no cost to this project.

	BREATHING AIR DISTRIBUTIONSYSTEM	U.C. per SF	96,300.00	SF	0		0	0	0	5.6	0	5.6
							\$0	\$0	\$0	\$539,280	\$0	\$539,280
Memo: Assume 50% less piping due to large open area within the RFS.												
	MAINTENANCE BAY GLOVE BOX - BREATHING AIR DISTRIBUTION SYSTEM	U.C. per SF	1,400.00	SF	0		0	0	0	11.2	0	11.2
							\$0	\$0	\$0	\$15,680	\$0	\$15,680
	HVAC ROOM BREATHING AIR DISTRIBUTION SYSTEM	U.C. per SF	6,500.00	SF	0		0	0	0	11.2	0	11.2
							\$0	\$0	\$0	\$72,800	\$0	\$72,800
	PERSONNEL AIRLOCK	U.C. per SF	850.00	SF	0		0	0	0	11.2	0	11.2
							\$0	\$0	\$0	\$9,520	\$0	\$9,520
	CLEAN TRANSFER AIRLOCK	U.C. per SF	730.00	SF	0		0	0	0	11.2	0	11.2
							\$0	\$0	\$0	\$8,176	\$0	\$8,176

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.04 BREATHING AIR												
Memo: Costs are based on the GEM Project design, assume the same type system and coverage will be required for this facility. No costs for the breathing air compressor have been included, assume provided to the project by the BWI equipment pool at no cost to this project.												
	WASH BAY AIRLOCK	U.C. per SF	850.00	SF	0		0 \$0	0 \$0	0 \$0	17.2 \$9,520	0 \$0	17.2 \$9,520
Subtotal							\$0	\$0	\$0	\$654,976	\$0	\$654,976
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							0.00%	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$654,976
Escalation							\$0	\$0	\$0	\$87,505	\$0	\$87,505
Contingency							\$0	\$0	\$0	\$366,512	\$0	\$366,512
---Total 4.2.15.04 BREATHING AIR					0		\$0	\$0	\$0	\$1,108,993	\$0	\$1,108,993

4.2.15.05 DUST SUPPRESSION

Memo: Costs are based on the GEM project. Assume this facility will require three complete GEM facility systems. This is based on the area of the dig face in relation to the dig area of the GEM project.

	DUST SUPPRESSIONSYSTEM (3COMPLETE SYSTEM)	U.C. per EA	3.00	EA	0			0 \$0	0 \$0	0 \$0	92242 \$276,726	0 \$0	92242 \$276,726
Subtotal								\$0	\$0	\$0	\$276,726	\$0	\$276,726
Sales Tax								\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							0.00%	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate													\$276,726
Escalation								\$0	\$0	\$0	\$36,971	\$0	\$36,971
Contingency								\$0	\$0	\$0	\$154,851	\$0	\$154,851
—Total 4.2.15.05 DUST SUPPRESSION					0			\$0	\$0	\$0	\$468,547	\$0	\$468,547

4.2.15.06 MISC. MECHANICAL

	MAINT. GLOVE BOX GLOVE PORTS-OVALS	U.C. per EA	25.00	EA	0			0 \$0	0 \$0	0 \$0	8000 \$200,000	0 \$0	8000 \$200,000
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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.15.06 MISC. MECHANICAL												
	MAINT. GLOVE BOX SAMPLE BAG-OUTS	<i>U.C. per EA</i>	4.00	EA	0		0 \$0	0 \$0	0 \$0	10000 \$40,000	0 \$0	10000 \$40,000
	MAINT. GLOVE BOX SAMPLE CANS	<i>U.C. per EA</i>	4.00	EA	0		0 \$0	0 \$0	0 \$0	5000 \$20,000	0 \$0	5000 \$20,000
	MAINT. GLOVE BOX BAG-OUT PORTS	<i>U.C. per EA</i>	4.00	EA	0		0 \$0	0 \$0	0 \$0	6400 \$25,600	0 \$0	6400 \$25,600
	MAINT. GLOVE BOX HOIST LOAD CELL	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	0 \$0	1500 \$1,500	0 \$0	1500 \$1,500
	MAINT. GLOVE BOX PORTABLE DECON VAC	<i>U.C. per EA</i>	1.00	EA	0		0 \$0	0 \$0	0 \$0	2000 \$2,000	0 \$0	2000 \$2,000
	MAINT. GLOVE BOX ALLOWANCE FOR REMOTE MAINTENANCE TOOLS	<i>U.C. per LS</i>	1.00	LS	0		0 \$0	0 \$0	0 \$0	50000 \$50,000	0 \$0	50000 \$50,000
	PIPE WASH BAY PIPING ALLOWANCE	<i>U.C. per LF</i>	640.00	LF	0.182 116	\$39.33 CN-PIPE	7.158 \$4,581	0 \$0	32.7 \$20,928	0 \$0	0 \$0	39.858 \$25,509
	PIPE HVAC ROOM MISC. PIPING ALLOWANCE	<i>U.C. per LF</i>	9,700.00	LF	0.182 1,765	\$39.33 CN-PIPE	7.158 \$69,433	0 \$0	32.7 \$317,190	0 \$0	0 \$0	39.858 \$386,623
Subtotal							\$74,014	\$0	\$338,118	\$339,100	\$0	\$751,232
Sales Tax							\$0	\$0	\$20,287	\$0	\$0	\$20,287
INEEUSubcontractorOverheads							26.96% \$35,604	\$0	\$172,407	\$0	\$0	\$208,011
Subtotal Estimate												\$979,530
Escalation							\$14,645	\$0	\$70,917	\$45,304	\$0	\$130,865
Contingency							\$61,340	\$0	\$297,032	\$189,754	\$0	\$548,127
—Total 4.2.15.06 MISC. MECHANICAL					1,882		\$185,603	\$0	\$898,761	\$574,158	\$0	\$1,658,522

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.16.01 GENERAL FACILITIES ELECTRICAL												
<i>Memo: Costs are based on the GEM project calculated square footage.</i>												
	FACILITY RACEWAYS	<i>U.C. per SF</i>										
			166,200.00	SF	0		0	0	0	17	0	17
							\$0	\$0	\$0	\$2,825,400	\$0	\$2,825,400
	FACILITY WIRE & CABLE	<i>U.C. per SF</i>										
			166,200.00	SF	0		0	0	0	6.36	0	6.36
							\$0	\$0	\$0	\$1,057,032	\$0	\$1,057,032
	FACILITY LIGHTING	<i>U.C. per SF</i>										
			166,200.00	SF	0		0	0	0	8.75	0	8.75
							\$0	\$0	\$0	\$1,454,250	\$0	\$1,454,250
	FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, ETC.)	<i>U.C. per SF</i>										
			166,200.00	SF	0		0	0	0	5.45	0	5.45
							\$0	\$0	\$0	\$905,790	\$0	\$905,790
<hr/>												
	Subtotal						\$0	\$0	\$0	\$6,242,472	\$0	\$6,242,472
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$6,242,472
	Escalation						\$0	\$0	\$0	\$833,994	\$0	\$833,994
	Contingency						\$0	\$0	\$0	\$3,050,680	\$0	\$3,050,680
<hr/>												
---Total	4.2.16.01 GENERAL FACILITIES ELECTRICAL				0		\$0	\$0	\$0	\$10,127,146	\$0	\$10,127,146

4.2.16.02.01 MAIN FEED CONDUITS AND CONDUCTORS

	ELEC	<i>U.C. per LF</i>										
500 MCM, 5 kV 3-CONDUCTOR MINING POWER CABLE			400.00	LF	0.1	\$35.89	3.589	0	30	0	0	33.589
					40	CN-ELEC	\$1,436	\$0	\$12,000	\$0	\$0	\$13,436
	ELEC	<i>U.C. per LF</i>										
250 MCM, 5 kV 3-CONDUCTOR MINING POWER CABLE			400.00	LF	0.08	\$35.89	2.871	0	19.75	0	0	22.621
					32	CN-ELEC	\$1,148	\$0	\$7,900	\$0	\$0	\$9,048
	ELEC	<i>U.C. per EA</i>										
500 MCM 5 kV TERMINATION KITS			6.00	EA	4	\$35.89	143.56	0	60	0	0	203.56
					24	CN-ELEC	\$861	\$0	\$360	\$0	\$0	\$1,221
	ELEC	<i>U.C. per EA</i>										
250 MCM 5 kV TERMINATION KITS			6.00	EA	4	\$35.89	143.56	0	45	0	0	188.56
					24	CN-ELEC	\$861	\$0	\$270	\$0	\$0	\$1,131

INEEL

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.16.02.01 MAIN FEED CONDUITS AND CONDUCTORS												
	HI-POTTESTING	ELEC			4	\$35.89	143.56	0	0	0	0	143.56
			6.00	EA	24	CN-ELEC	\$861	\$0	\$0	\$0	\$0	\$861
	500 MCM THHN 600 VOLT COPPER WIRE	ELEC			0.054	\$35.89	1.938	0	0	0	0	1.938
			3,600.00	LF	194	CN-ELEC	\$6,977	\$0	\$0	\$0	\$0	\$6,977
Memo: Assume main switchgear is located within 100 feet of the power transformers.												
	5 EMT CONDUIT WITH FITTINGS AND SUPPORTS	ELEC			0.3	\$35.89	10.767	0	0	0	0	10.767
			1,600.00	LF	480	CN-ELEC	\$17,227	\$0	\$0	\$0	\$0	\$17,227
Subtotal							\$29,372	\$0	\$20,530	\$0	\$0	\$49,902
Sales Tax							\$0	\$0	\$1,232	\$0	\$0	\$1,232
INEEUSubcontractorOverheads							\$14,129	\$0	\$10,468	\$0	\$0	\$24,598
Subtotal Estimate												\$75,732
Escalation							\$5,812	\$0	\$4,306	\$0	\$0	\$10,118
Contingency							\$21,259	\$0	\$15,751	\$0	\$0	\$37,010
--Total 4.2.16.02.01 MAIN FEED CONDUITS AND CONDUCTORS					818		\$70,573	\$0	\$52,207	\$0	\$0	\$122,859

4.2.16.02.02 TRANSFORMERS

	1000kVA 4160-480 DIST. TRANSFORMER, S-XFR-1	ELEC			76	\$35.89	2727.64	1500	16800	0	0	21027.64
			1.00	EA	76	CN-ELEC	\$2,728	\$1,500	\$16,800	\$0	\$0	\$21,028
Memo: Transformer pricing is based on R. S. Means.												

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.1 6.02.02 TRANSFORMERS</u>												
	ELEC	<i>U.C. per EA</i>			100	\$35.89	3589	1500	25200	0	0	30289
	2000 kVA 4160-480 DIST. TRANSFORMER, N-XFR-I		1.00	EA	100	CN-ELEC	\$3,589	\$1,500	\$25,200	\$0	\$0	\$30,289
Memo: Transformer pricing is based on R. S. Means.												
Subtotal							\$6,317	\$3,000	\$42,000	\$0	\$0	\$51,317
Sales Tax							\$0	\$0	\$2,520	\$0	\$0	\$2,520
INEEUSubcontractorOverheads							\$3,039	\$1,443	\$21,416	\$0	\$0	\$25,898
Subtotal Estimate												\$79,734
Escalation							\$1,250	\$594	\$8,809	\$0	\$0	\$10,652
Contingency							\$4,572	\$2,171	\$32,223	\$0	\$0	\$38,966
---Total 4.2.1 6.02.02 TRANSFORMERS					176		\$15,177	\$7,208	\$106,968	\$0	\$0	\$129,353

4.2.16.02.03 SITEWORK

	ELEC	<i>U.C. per EA</i>					0	0	0	10000	0	10000
	ALLOWANCE FOR TRANSFOMER PADS		2.00	EA	0		\$0	\$0	\$0	\$20,000	\$0	\$20,000
Subtotal							\$0	\$0	\$0	\$20,000	\$0	\$20,000
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads							\$0	\$0	\$0	\$9,621	\$0	\$9,621
Subtotal Estimate												\$29,621
Escalation							\$0	\$0	\$0	\$3,957	\$0	\$3,957
Contingency							\$0	\$0	\$0	\$14,476	\$0	\$14,476
—Total 4.2.16.02.03 SITEWORK					0		\$0	\$0	\$0	\$48,054	\$0	\$48,054

4.2.1 6.02.04 SWITCHGEAR

	ELEC	<i>U.C. per EA</i>			120	\$35.89	4306.8	1500	35525	0	0	41331.8
	S-MCC-1, 2000 AMP MAIN, 277/408 VOLT		1.00	EA	120	CN-ELEC	\$4,307	\$1,500	\$35,525	\$0	\$0	\$41,332
	ELEC	<i>U.C. per EA</i>			160	\$35.89	5742.4	1500	46525	0	0	53767.4
	MCC-I, 4000 AMP MAIN, 277/408 VOLT		1.00	EA	160	CN-ELEC	\$5,742	\$1,500	\$46,525	\$0	\$0	\$53,767

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.16.02.04 SWITCHGEAR</u>												
	ELEC	<i>U.C. per EA</i>			<i>16</i>	<i>\$35.89</i>	<i>574.24</i>	<i>0</i>	<i>3375</i>	<i>0</i>	<i>0</i>	<i>3949.24</i>
S-PP-1, 600 AMP 277/480 PANEL			1.00	EA	16	CN-ELEC	\$574	\$0	\$3,375	\$0	\$0	\$3,949
	ELEC	<i>U.C. per EA</i>			<i>8</i>	<i>\$35.89</i>	<i>287.12</i>	<i>0</i>	<i>1690</i>	<i>0</i>	<i>0</i>	<i>1977.12</i>
S-PP-2, 100 AMP 277/480 PANEL			1.00	EA	8	CN-ELEC	\$287	\$0	\$1,690	\$0	\$0	\$1,977
	ELEC	<i>U.C. per EA</i>			<i>16</i>	<i>\$35.89</i>	<i>574.24</i>	<i>0</i>	<i>3375</i>	<i>0</i>	<i>0</i>	<i>3949.24</i>
N-PP-1, 600 AMP 277/480 PANEL			1.00	EA	16	CN-ELEC	\$574	\$0	\$3,375	\$0	\$0	\$3,949
	ELEC	<i>U.C. per EA</i>			<i>16</i>	<i>\$35.89</i>	<i>574.24</i>	<i>0</i>	<i>3375</i>	<i>0</i>	<i>0</i>	<i>3949.24</i>
L-LP-1, 600 AMP 277/480 PANEL			1.00	EA	16	CN-ELEC	\$574	\$0	\$3,375	\$0	\$0	\$3,949
	ELEC	<i>U.C. per EA</i>			<i>8</i>	<i>\$35.89</i>	<i>287.12</i>	<i>0</i>	<i>2450</i>	<i>0</i>	<i>0</i>	<i>2737.12</i>
225 AMP 277/480 LIGHTING, HEAT, AND POWER PANELS			12.00	EA	96	CN-ELEC	\$3,445	\$0	\$29,400	\$0	\$0	\$32,845
	ELEC	<i>U.C. per LS</i>			<i>80</i>	<i>\$35.89</i>	<i>2871.2</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>0</i>	<i>7871.2</i>
ALLOWANCE FOR DISCONNECT SWITCHES			1.00	LS	80	CN-ELEC	\$2,871	\$0	\$5,000	\$0	\$0	\$7,871
Subtotal							\$18,376	\$3,000	\$128,265	\$0	\$0	\$149,641
Sales Tax							\$0	\$0	\$7,696	\$0	\$0	\$7,696
INEEUSubcontractorOverheads							\$8,839	\$1,443	\$65,403	\$0	\$0	\$75,685
Subtotal Estimate												\$233,022
Escalation							\$3,636	\$594	\$26,902	\$0	\$0	\$31,132
Contingency							\$13,300	\$2,171	\$98,406	\$0	\$0	\$113,877
--Total 4.2.16.02.04 SWITCHGEAR					512		\$44,151	\$7,208	\$326,672	\$0	\$0	\$378,031

4.2.16.02.05 MISC. CONNECTIONS

	ELEC	<i>U.C. per EA</i>			<i>2</i>	<i>\$35.89</i>	<i>71.78</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>0</i>	<i>121.78</i>
5 HP MOTOR CONNECTION			3.00	EA	6	CN-ELEC	\$215	\$0	\$150	\$0	\$0	\$365
	ELEC	<i>U.C. per EA</i>			<i>3</i>	<i>\$35.89</i>	<i>107.67</i>	<i>0</i>	<i>125</i>	<i>0</i>	<i>0</i>	<i>232.67</i>
25 HP MOTOR CONNECTION			2.00	EA	6	CN-ELEC	\$215	\$0	\$250	\$0	\$0	\$465

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project- Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.16.02.05 MISC. CONNECTIONS</u>												
	ELEC	<i>U.C. per EA</i>			<i>4</i>	<i>\$35.89</i>	<i>143.56</i>	<i>0</i>	<i>250</i>	<i>0</i>	<i>0</i>	<i>393.56</i>
50 HP MOTOR CONNECTION			1.00	EA	4	CN-ELEC	\$144	\$0	\$250	\$0	\$0	\$394
	ELEC	<i>U.C. per EA</i>			<i>5</i>	<i>\$35.89</i>	<i>179.45</i>	<i>0</i>	<i>400</i>	<i>0</i>	<i>0</i>	<i>579.45</i>
150 HP MOTOR CONNECTION			2.00	EA	10	CN-ELEC	\$359	\$0	\$800	\$0	\$0	\$1,159
	ELEC	<i>U.C. per EA</i>			<i>8</i>	<i>\$35.89</i>	<i>287.12</i>	<i>0</i>	<i>600</i>	<i>0</i>	<i>0</i>	<i>887.72</i>
300 HP MOTOR CONNECTION			2.00	EA	16	CN-ELEC	\$574	\$0	\$1,200	\$0	\$0	\$1,774
	ELEC	<i>U.C. per EA</i>			<i>8</i>	<i>\$35.89</i>	<i>287.12</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>0</i>	<i>487.12</i>
CHILLER			1.00	EA	8	CN-ELEC	\$287	\$0	\$200	\$0	\$0	\$407
Subtotal							\$1,795	\$0	\$2,850	\$0	\$0	\$4,645
Sales Tax							\$0	\$0	\$171	\$0	\$0	\$171
INEEUSubcontractorOverheads							\$863	\$0	\$1,453	\$0	\$0	\$2,316
Subtotal Estimate												\$7,132
Escalation							\$355	\$0	\$598	\$0	\$0	\$953
Contingency							\$1,299	\$0	\$2,187	\$0	\$0	\$3,485
--Total 4.2.16.02.05 MISC. CONNECTIONS					50		\$4,312	\$0	\$7,259	\$0	\$0	\$11,570

4.2.16.02.06 TESTING

	ELEC	<i>U.C. per LS</i>			<i>240</i>	<i>\$35.89</i>	<i>8613.6</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>8613.6</i>
ALLOWANCE FOR TESTING OF SYSTEMS AND EQUIPMENT			1.00	LS	240	CN-ELEC	\$8,614	\$0	\$0	\$0	\$0	\$8,614

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>4.2.16.02.06 TESTING</u>												
	Subtotal						\$8,614	\$0	\$0	\$0	\$0	\$8,614
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	48.10%					\$4,143	\$0	\$0	\$0	\$0	\$4,143
	Subtotal Estimate											\$12,757
	Escalation						\$1,704	\$0	\$0	\$0	\$0	\$1,704
	Contingency						\$6,234	\$0	\$0	\$0	\$0	\$6,234
--Total	4.2.16.02.06 TESTING				240		\$20,696	\$0	\$0	\$0	\$0	\$20,696

4.2.16.03 MONITORING AND CONTROLS

Memo: Unit costs are based on the GEM project calculated square footage. This unit cost also included HVAC controls.

	MONITORING AND CONTROLS-INSTRUMENTATION (BASED ON THE GEM PROJECT SF)	U.C. par SF 166,200.00 SF		0		\$0	\$0	\$0	\$980,580	\$0	\$0	\$980,580
	MONITORING AND CONTROLS-CABLES (BASED ON THE GEM PROJECT SF)	U.C. par SF 166,200.00 SF		0		\$0	\$0	\$0	\$249,300	\$0	\$0	\$249,300
Memo: Unit costs were adjusted down by 50% from the GEM project due to the economy of scale.												
	MONITORING AND CONTROLS-RACEWAYS (BASED ON THE GEM PROJECT SF)	U.C. par SF 166,200.00 SF		0		\$0	\$0	\$0	\$240,990	\$0	\$0	\$240,990
Memo: Unit costs were adjusted down by 50% from the GEM project due to the economy of scale.												

	Subtotal						\$0	\$0	\$0	\$1,470,870	\$0	\$1,470,870
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$1,470,870
	Escalation						\$0	\$0	\$0	\$196,508	\$0	\$196,508
	Contingency						\$0	\$0	\$0	\$718,810	\$0	\$718,810
--Total	4.2.16.03 MONITORINGAND CONTROLS				0		\$0	\$0	\$0	\$2,386,189	\$0	\$2,386,189

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.16.04 CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION												
		<i>U.C. per EA</i>										
	CRITICALITY SYSTEM INSTALLATION		3.00	EA	0		\$0	\$0	\$0	20185	0	20185
	Memo: Based on the GEM project installation costs for criticality equipment.									\$60,555	\$0	\$60,555
		<i>U.C. per LS</i>										
	RADIOLOGICAL MONITORING EQUIPMENT INSTALLATION		1.00	LS	0		\$0	\$0	\$0	16349	0	16349
							\$0	\$0	\$0	\$16,349	\$0	\$16,349
Subtotal							\$0	\$0	\$0	\$76,904	\$0	\$76,904
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$76,904
Escalation							\$0	\$0	\$0	\$10,274	\$0	\$10,274
Contingency							\$0	\$0	\$0	\$37,583	\$0	\$37,583
--Total 4.2.16.04 CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION					0		\$0	\$0	\$0	\$124,761	\$0	\$124,761
4.2.16.05 CCTV MONITORING SYSTEM												
Memo: Costs are based on the GEM project calculated square footage.												
		<i>U.C. per SF</i>										
	CCTV MONITORING SYSTEM-INSTALLATION LABOR		166,200.00	SF	0		\$0	\$0	\$0	1.36	0	1.36
	Memo: Unit costs are based on the GEM project. Camera equipment costs are included in the procurement WBS.									\$226,032	\$0	\$226,032
Subtotal							\$0	\$0	\$0	\$226,032	\$0	\$226,032
Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
INEEL/Subcontractor Overheads							\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate												\$226,032
Escalation							\$0	\$0	\$0	\$30,198	\$0	\$30,198
Contingency							\$0	\$0	\$0	\$110,461	\$0	\$110,461
--Total 4.2.16.05 CCTV MONITORING SYSTEM					0		\$0	\$0	\$0	\$366,691	\$0	\$366,691

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 7-R**

Client: **SL Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.16.06 INTEGRATION CONTROLS SYSTEM												
<i>Memo: Costs are based on input from the Human/Intelligent systems group. These costs were developed by identifying work scope tasks and required equipment. Included in the estimate back-up file are the developed spreadsheets identifying these tasks in full detail.</i>												
E07	ELECTRONIC ENGINEERING	BBWI-A	1.00	LS	4,980	\$73.95 E07	368270.67 \$368,271	0 \$0	0 \$0	0 \$0	0 \$0	368270.67 \$368,271
E11	MECHANICAL ENGINEERING	BBWI-A	1.00	LS	3,600	\$81.44 E11	293198.92 \$293,199	0 \$0	0 \$0	0 \$0	0 \$0	293198.92 \$293,199
E59	DESIGNER, MECHANICAL	BBWI-A	1.00	LS	3,360	\$62.95 E59	211517.89 \$211,518	0 \$0	0 \$0	0 \$0	0 \$0	211517.89 \$211,518
E07	ELECTRONIC ENGINEERING	BBWI-A	1.00	LS	1,900	\$73.95 E07	140504.87 \$140,505	0 \$0	0 \$0	0 \$0	0 \$0	140504.87 \$140,505
E17	QUALITY ENGINEERING	BBWI-A	1.00	LS	415	\$74.43 E17	30887.77 \$30,888	0 \$0	0 \$0	0 \$0	0 \$0	30887.77 \$30,888
E19	SAFETY ENGINEERING	BBWI-A	1.00	LS	415	\$76.85 E19	31894.31 \$31,894	0 \$0	0 \$0	0 \$0	0 \$0	31894.31 \$31,894
E28	PROJ MGMT - ENGINEERING/SCIENTIFIC	BBWI-A	1.00	LS	2,076	\$96.71 E28	200769.21 \$200,769	0 \$0	0 \$0	0 \$0	0 \$0	200769.21 \$200,769
E24	SYSTEMS ENGINEERING	BBWI-A	1.00	LS	585	\$85.52 E24	50026.67 \$50,027	0 \$0	0 \$0	0 \$0	0 \$0	50026.67 \$50,027
204	MANAGER, SCI/ENG FUNCTION	BBWI-A	1.00	LS	415	\$124.64 204	51724.1 \$51,724	0 \$0	0 \$0	0 \$0	0 \$0	51724.1 \$51,724

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project- Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
4.2.16.06 INTEGRATION CONTROLS SYSTEM												
<i>Memo: Costs are based on input from the Human/Intelligent systems group. These costs were developed by identifying work scope tasks and required equipment. Included in the estimate back-up file are the developed spreadsheets identifying these tasks in full detail.</i>												
	MATERIALS	U.C. per LS					0	0	1700000	0	0	1700000
			1.00	LS	0		\$0	\$0	\$1,700,000	\$0	\$0	\$1,700,000
<hr/>												
	Subtotal						\$1,378,794	\$0	\$1,700,000	\$0	\$0	\$3,078,794
	Sales Tax						\$0	\$0	\$102,000	\$0	\$0	\$102,000
	INEEU Subcontractor Overheads	4.94%					\$157,183	\$0	\$0	\$0	\$0	\$157,183
<hr/>												
	Subtotal Estimate											\$3,337,977
	Escalation						\$205,207	\$0	\$240,747	\$0	\$0	\$445,954
	Contingency						\$750,628	\$0	\$880,633	\$0	\$0	\$1,631,261
<hr/>												
—Total 4.2.16.06 INTEGRATION CONTROLS SYSTEM					17,746		\$2,491,811	\$0	\$2,923,380	\$0	\$0	\$5,415,191

OPC3100 TESTING AND TURNOVER PLANNING

Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

	TESTING & TURNOVER PLANNING	U.C. per \$					0	0	0	0	0.002	0.002
			106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$212,128	\$212,128
<hr/>												
	Subtotal						\$0	\$0	\$0	\$0	\$212,128	\$212,128
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEU Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
<hr/>												
	Subtotal Estimate											\$212,128
	Escalation						\$0	\$0	\$0	\$0	\$34,110	\$34,110
	Contingency						\$0	\$0	\$0	\$0	\$176,796	\$176,796
<hr/>												
—Total OPC3100 TESTING AND TURNOVER PLANNING					0		\$0	\$0	\$0	\$0	\$423,035	\$423,035

OPC3200 S. O. TESTING

Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

	S. O. TESTING	U.C. per \$					0	0	0	0	0.03	0.03
			106,064,074.00	\$	0		\$0	\$0	\$0	\$0	\$3,181,922	\$3,181,922

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Estimating Services Department

Material Costs where applicable include Idaho State Sales Tax

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DETAIL ITEM REPORT

Project Name: *OU-7-10 Staged Interim Action*
Stage III Project - Retrieval System Project - Option 1
 Project Location: *INEEL-RWMC*
 Estimate Number: *5974-2 Option 1-R*

Client: *S.L. Austad*
 Prepared By: *S. N. Wasley/R. D. Adams*
 Estimate Type: *Project Support*

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equip</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
OPC3200 S. O. TESTING												
<i>Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.</i>												
	Subtotal						\$0	\$0	\$0	\$0	\$3,181,922	\$3,181,922
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$511,653	\$3,181,922
	Escalation						\$0	\$0	\$0	\$0	\$511,653	\$511,653
	Contingency						\$0	\$0	\$0	\$0	\$2,651,945	\$2,651,945
—Total OPC3200 S. O. TESTING					0		\$0	\$0	\$0	\$0	\$6,345,521	\$6,345,521

OPC3300 ORR SUPPORT

Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>					0	0	0	0	0.002	0.002
	ORR SUPPORT	106,064,074.00	\$		0		\$0	\$0	\$0	\$0	\$233,341	\$233,341
	Subtotal						\$0	\$0	\$0	\$0	\$233,341	\$233,341
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEL/Subcontractor Overheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate						\$0	\$0	\$0	\$0	\$37,521	\$233,341
	Escalation						\$0	\$0	\$0	\$0	\$37,521	\$37,521
	Contingency						\$0	\$0	\$0	\$0	\$194,476	\$194,476
—Total OPC3300 ORR SUPPORT					0		\$0	\$0	\$0	\$0	\$465,338	\$465,338

OPC3400 FACILITY ACCEPTANCE REVIEW

Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>					0	0	0	0	0.001	0.001
	FACILITY ACCEPTANCE REVIEW	106,064,074.00	\$		0		\$0	\$0	\$0	\$0	\$159,096	\$159,096

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
OPC3400 FACILITY ACCEPTANCE REVIEW												
<i>Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.</i>												
	Subtotal							\$0	\$0	\$0	\$0	\$159,096
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate							\$0	\$0	\$0	\$0	\$159,096
	Escalation							\$0	\$0	\$0	\$25,583	\$25,583
	Contingency							\$0	\$0	\$0	\$132,597	\$132,597
--Total OPC3400 FACILITY ACCEPTANCE REVIEW						0		\$0	\$0	\$0	\$0	\$317,276

OPC3500 RADIOLOGICAL CONTROL SUPPORT

Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>				0	0	0	0	0.001	0.001	
	RAD CONTROL SUPPORT	106,064,074.00	\$		0	\$0	\$0	\$0	\$0	\$116,670	\$116,670	
	Subtotal					\$0	\$0	\$0	\$0	\$116,670	\$116,670	
	Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0	
	INEEUSubcontractorOverheads	0.00%				\$0	\$0	\$0	\$0	\$0	\$0	
	Subtotal Estimate					\$0	\$0	\$0	\$0	\$0	\$116,670	
	Escalation					\$0	\$0	\$0	\$0	\$18,761	\$18,761	
	Contingency					\$0	\$0	\$0	\$0	\$97,238	\$97,238	
--Total OPC3500 RADIOLOGICAL CONTROL SUPPORT						0		\$0	\$0	\$0	\$232,669	\$232,669

OPC3600 OPERATOR TRAINING

Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>				0	0	0	0	0.02	0.02	
	OPERATOR TRAINING	106,064,074.00	\$		0	\$0	\$0	\$0	\$0	\$2,121,281	\$2,121,281	

DETAIL ITEM REPORT

Project Name: OU-7-10 **Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
OPC3600 OPERATOR TRAINING												
<i>Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.</i>												
	Subtotal							\$0	\$0	\$0	\$0	\$2,121,281
	Sales Tax							\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%						\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$2,121,281
	Escalation							\$0	\$0	\$0	\$341,102	\$341,102
	Contingency							\$0	\$0	\$0	\$1,767,963	\$1,767,963
---Total OPC3600 OPERATOR TRAINING					0			\$0	\$0	\$0	\$0	\$4,230,347

OPC3700 OPERATING PROCEDURES

Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>						0	0	0	0	0.004	0.004
	OPERATING PROEDURES	106,064,074.00	\$		0			\$0	\$0	\$0	\$0	\$466,682	\$466,682
	Subtotal							\$0	\$0	\$0	\$0	\$466,682	\$466,682
	Sales Tax							\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractor Overheads	0.00%						\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$466,682	\$466,682
	Escalation							\$0	\$0	\$0	\$0	\$75,042	\$541,724
	Contingency							\$0	\$0	\$0	\$0	\$388,952	\$930,676
---Total OPC3700 OPERATING PROCEDURES					0			\$0	\$0	\$0	\$0	\$930,676	\$930,676

OPC3800 START-UP COORDINATION

Memo: Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.

		<i>U.C. per \$</i>						0	0	0	0	0.001	0.001
	STARTUP COORDINATION	106,064,074.00	\$		0			\$0	\$0	\$0	\$0	\$137,883	\$137,883

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S. L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EquipDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
OPC3800 START-UP COORDINATION												
Memo: Percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000.												
	Subtotal								\$0	\$0	\$137,883	\$137,883
	Sales Tax								\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%							\$0	\$0	\$0	\$0
	Subtotal Estimate								\$0	\$0		\$137,883
	Escalation								\$0	\$0	\$22,172	\$22,172
	Contingency								\$0	\$0	\$114,918	\$114,918
---Total OPC3800 START-UP COORDINATION					0			\$0	\$0	\$0	\$274,973	\$274,973

OPC3900 SPARES

Memo: In support of start-up and testing only. Allow six percent of procured items, electrical switchgear, and panels.

		U.C. per \$		0	0	0.06	0	0	0.06	
SPARES		10,839,872.00	\$	0	\$0	\$650,392	\$0	\$0	\$650,392	
Memo: Calculated at 6% of procurement costs less RCS and fabric structures procurement costs.										
Subtotal					\$0	\$0	\$650,392	\$0	\$0	\$650,392
Sales Tax					\$0	\$0	\$39,024	\$0	\$0	\$39,024
INEEUSubcontractorOverheads		0.00%			\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$689,416
Escalation					\$0	\$0	\$110,858	\$0	\$0	\$110,858
Contingency					\$0	\$0	\$574,588	\$0	\$0	\$574,588
---Total OPC3900 SPARES				0	\$0	\$0	\$1,374,862	\$0	\$0	\$1,374,862

7.0 PROJECT MANAGEMENT

Memo: Percentage of construction and procurement costs based on detailed input from the project team for the **LCB** effort, **OU 7-10 PIT-9 STAGE 111- LCB**, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the **CSIX/TRU** Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.

		<i>U.C. per \$</i>			0	0	0	0	0.09	0.09
	PROJECT MANAGEMENT SUPPORT	106,064,074.00	\$	0	\$0	\$0	\$0	\$0	\$9,545,767	\$9,545,767

DETAIL ITEM REPORT

Project Name: **OU-7-10 Staged Interim Action**
Stage III Project - Retrieval System Project - Option 1
 Project Location: **INEEL-RWMC**
 Estimate Number: **5974-2 Option 1-R**

Client: **S.L. Austad**
 Prepared By: **S. N. Wasley/R. D. Adams**
 Estimate Type: **Project Support**

<u>Code</u>	<u>Description</u>	<u>Contractor</u>	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	<u>TOTAL</u>
<u>7.0 PROJECT MANAGEMENT</u>												
Memo: Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE III LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepancies occurred, an average of the two percentages was applied here.												
	Subtotal						\$0	\$0	\$0	\$0	\$9,545,767	\$9,545,767
	Sales Tax						\$0	\$0	\$0	\$0	\$0	\$0
	INEEUSubcontractorOverheads	0.00%					\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal Estimate											\$9,545,767
	Escalation						\$0	\$0	\$0	\$0	\$1,021,397	\$1,021,397
	Contingency						\$0	\$0	\$0	\$0	\$4,555,003	\$4,555,003
—Total 7.0 PROJECT MANAGEMENT					0		\$0	\$0	\$0	\$0	\$15,122,167	\$15,122,167

Subtotal	OU 7-10 STAGE III - RETRIEVAL SYSTEM PROJECT- OPTION		\$13,782,023	\$3,483,014	\$47,715,960	\$39,044,040	\$55,760,481	\$**,**,***
Sales Tax #1			\$0	\$0	\$2,862,958	\$0	\$0	\$2,862,958
			\$4,677,750	\$1,148,738	\$3,485,727	\$1,139,469	\$0	\$10,451,684
INEEUSubcontractor Overheads								
Subtotal Estimate			\$2,449,772	\$600,118	\$5,305,432	\$4,403,546	\$5,687,527	\$**,**,***
Escalation			\$10,206,161	\$2,582,053	\$31,701,051	\$22,570,580	\$33,008,947	\$18,446,395
Contingency								
Total	OU 7-10 STAGE III - RETRIEVAL SYSTEM PROJECT - OPTION	343,570	\$31,1	\$7,8	,	7,635	456,955	345
#1								